

ESSORIES BEVERAGE COOLING EQUIPMENT COILS, UNIT COOLERS CONDENSER  
NOVEMBER, 1951  
NDENSING UNITS CONTROLS, SWITCHES COOLING TOWERS COPPER TUBING DRIER  
LIQUID INDICATORS FOOD STORAGE & DISPLAY UNITS LIQUID CHILLING EQUIPMENT  
TORS PARTS EQUIPMENT & SUPPLIES  
RIGERANT COIL, UNIT COOLERS CONDENSER  
LVES COILS, UNIT COOLERS CONDENSER  
CESSORIES  
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ITORS PACKAGED AIR CONDITIONERS PACKAGED COMMERCIAL EQUIPMENT PUMP  
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# Commercial Refrigeration

AND AIR CONDITIONING



*the*  
**"Tell-All"**  
*issue*

7th All-Industry Exposition

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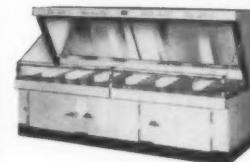
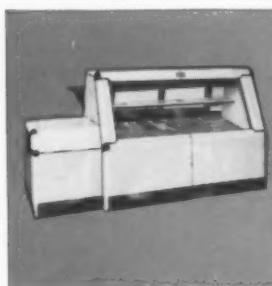
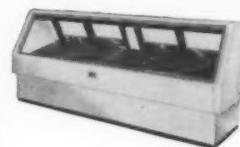
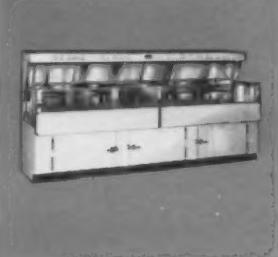
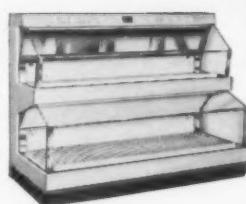
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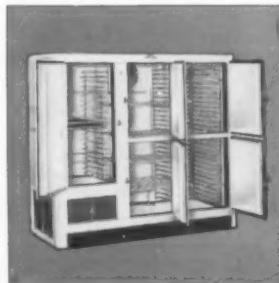
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NOVEMBER, 1951

VOLUME 8, No. 11

# Commercial Refrigeration AND AIR CONDITIONING

## ENCLOSURE 1948 THE REFRIGERATION INDUSTRY

THIS MAGAZINE has no official affiliation with ANY group, society or association.

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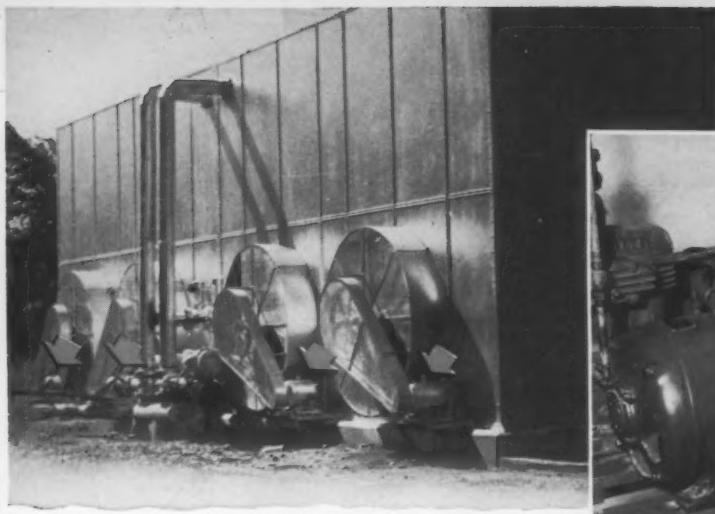
## Chrysler Airtemp

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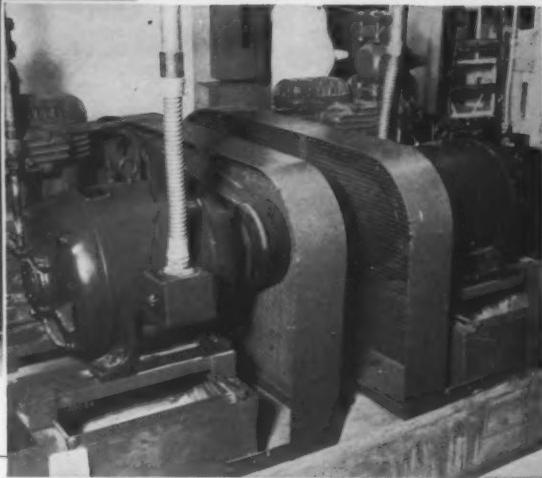
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Four Century 5 horsepower splash proof motors driving fans.



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150 to 400 horsepower

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are  
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REFRIGERATION and  
AIR CONDITIONING  
EXPOSITION**

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the latest  
*Acme*  
**INNOVATIONS**

see you at  
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in CHICAGO  
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A new, more compact design that features low suction pressure loss and saves you valuable space. You get the maximum gain from each degree of superheat. This new heat exchanger comes in eleven models with capacities from 3 to 200 tons, has a 13 to 1 ratio of gas side to liquid side surface, and gives you complete heat transfer and pressure drop data permitting economical selection for any system, at any temperature.

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(Remote Room Conditioners)



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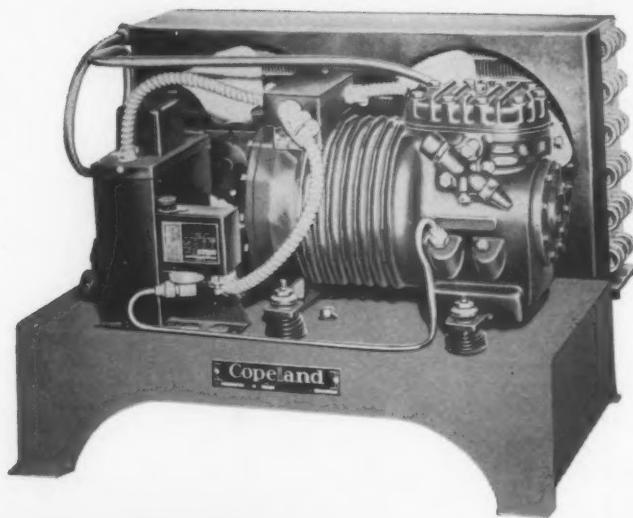
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the line for **Greater Sales!**



With open-type units and

Copelametics in sizes of 1/6 H.P. through  
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Get behind the product that's behind you all the way . . . the  
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Display and sell the new, complete Copeland line.

**COPELAMETIC**  
THE ACCESSIBLE HERMETIC  
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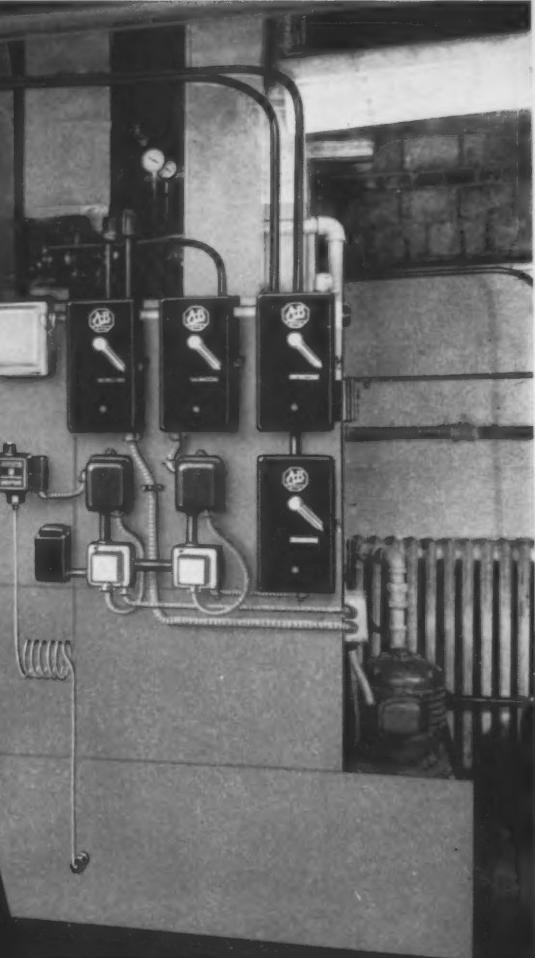
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*Manufacturers of*

**REFRIGERATION UNITS (OPEN-TYPE AND COPELAMETIC), WATER COOLERS, REFRIGERATORS**

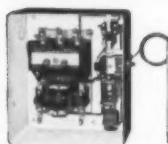
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**and AIR CONDITIONING • NOVEMBER, 1951**



Kathabar Air Conditioner, made by Surface Combustion Corporation, Toledo, Ohio, is equipped with four A-B Bulletin 712 Combination Starters. Each unit consists of an A-B automatic solenoid starter and a manually operated disconnect unit in one cabinet.

**A-B Special Refrigeration Control Unit**



Allen-Bradley offers a wide line of special refrigeration control panels . . . all the necessary controls in one enclosure. Pressure and temperature controls, manual and automatic starters are mounted on one panel.

**A-B Bulletin 712 Combination Starter**



Bulletin 712, Size 1, Combination Starter with fuse clips in pressed steel enclosure. A-B Combination Starters reduce installation time, save space, result in a neater wiring job, and provide extra safety. Trouble free.

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Dependable overload relays . . . Allen-Bradley thermal relays are accurate and always dependable . . . even after long service.

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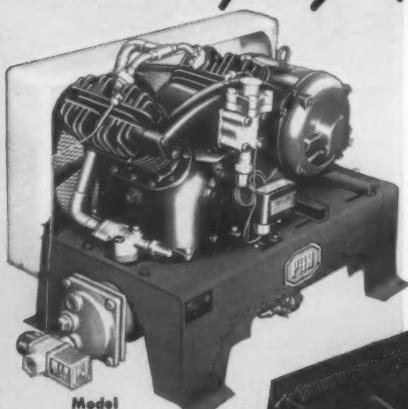
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methods assure...*



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*B.T.U. Capacity Ratings are Always Right!*



Model  
HWC-50



PARmetic  
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Lynch modern Calorimeter tests  
establish accurately PAR and PARmetic B.T.U.

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When you buy PAR or PARmetic,

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units from 1/8 to 1/3 H.P.

BY COMPARISON—YOU'LL BUY PAR and PARmetic



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COMPRESSORS



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# NEW SERIES "50"

## "MONOPANEL" Cold Storage Door

ALL STYLES NOW AVAILABLE



REACH-IN



VESTIBULE



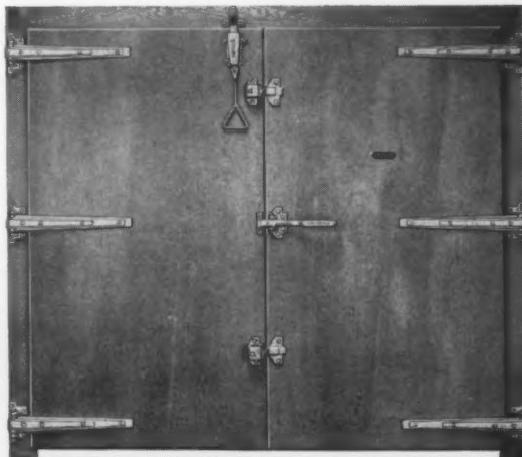
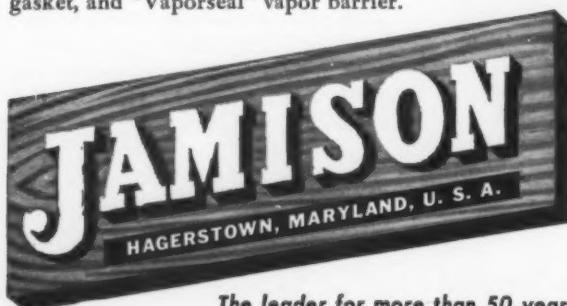
TRACK



WALK-IN

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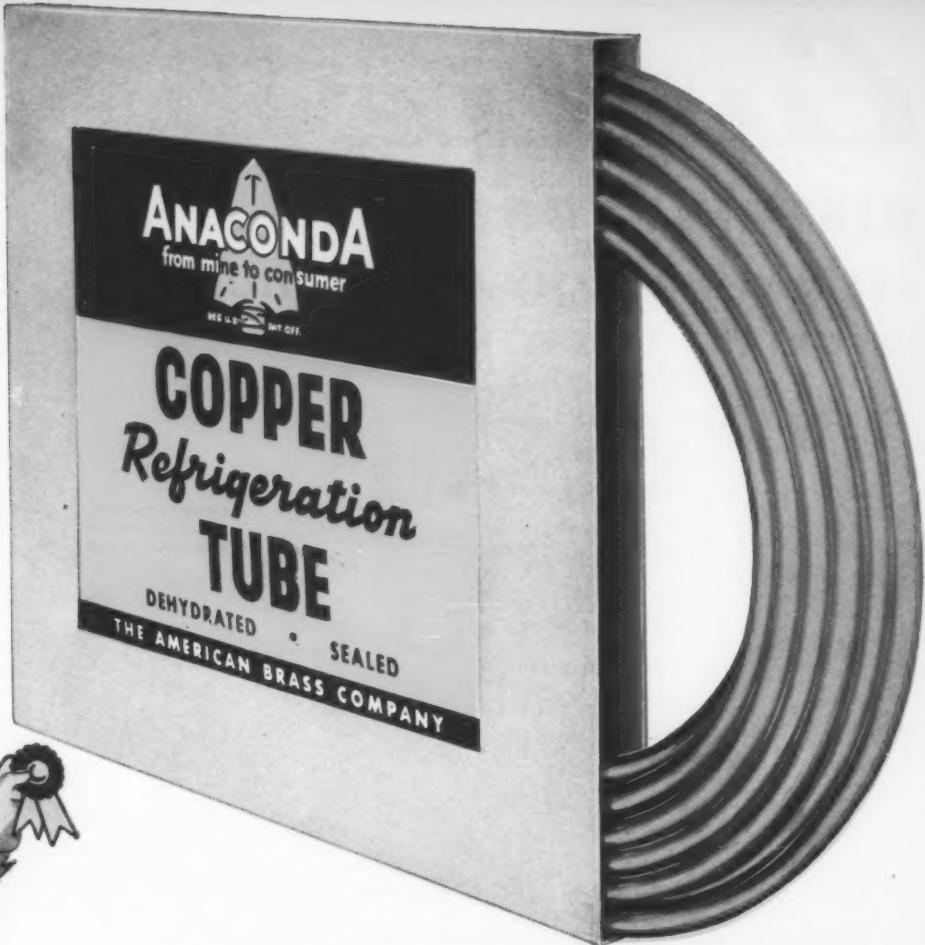


DOUBLE

*Before you buy your next cold storage doors, be sure you have full information on the Series "50". Write for Catalog.*

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Clean, dry. Dehydrated even in excess of A.S.R.E. requirements.  
Mirror-smooth inside surface. Makes solid seats.

Uniform cross section.

Uniform softness.

Tube ends sealed.

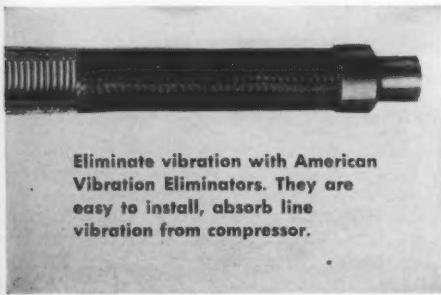
Packed in strong, distinctive carton.

50-ft. coils.\*

ALL the  
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tube qualities  
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**ONE package!**

Ask your wholesaler for ANACONDA Refrigeration Tubes and American Vibration Eliminators for refrigeration, air conditioning and for general use. Made by The American Brass Company, Waterbury 20, Connecticut. In Canada: Anaconda American Brass Ltd., New Toronto, Ontario.

4154



Eliminate vibration with American  
Vibration Eliminators. They are  
easy to install, absorb line  
vibration from compressor.

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for consistent uniformity—ask for

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REFRIGERATION PRODUCTS

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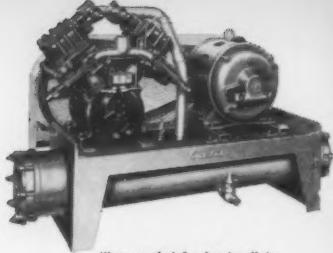
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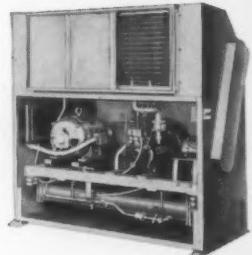
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Water-cooled Condensing Units  
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Evaporative Condensers,  
Cooling Towers and  
Air Handling Units to match



Central Type—  
10-15 ton

The broad CURTIS line of Air Conditioning, Temperature and Humidity Control equipment enables CURTIS distributors to quote and get many of these installations.

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Curtis Refrigerating Machine Division  
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Street.....  
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R51-B

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See Our Exhibit at  
NAVY PIER - Chicago

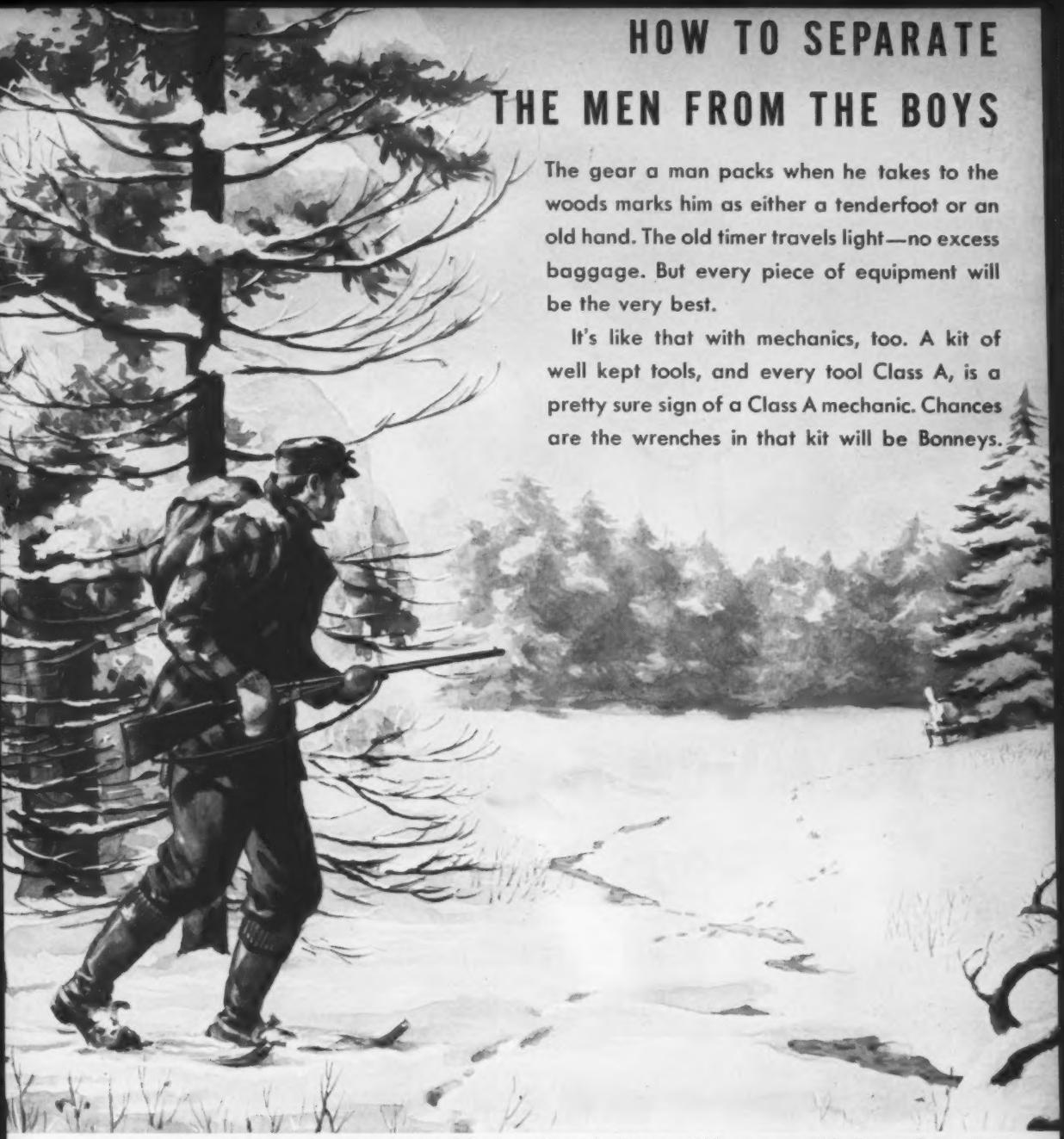


REFRIGERATION AND  
AIR CONDITIONING  
EXPOSITION  
Nov. 5-8, 1951

97 Years of  
Successful Manufacturing  
Experience is  
"Built-In"  
Curtis Equipment



Package Type—  
2-4-6-8 ton



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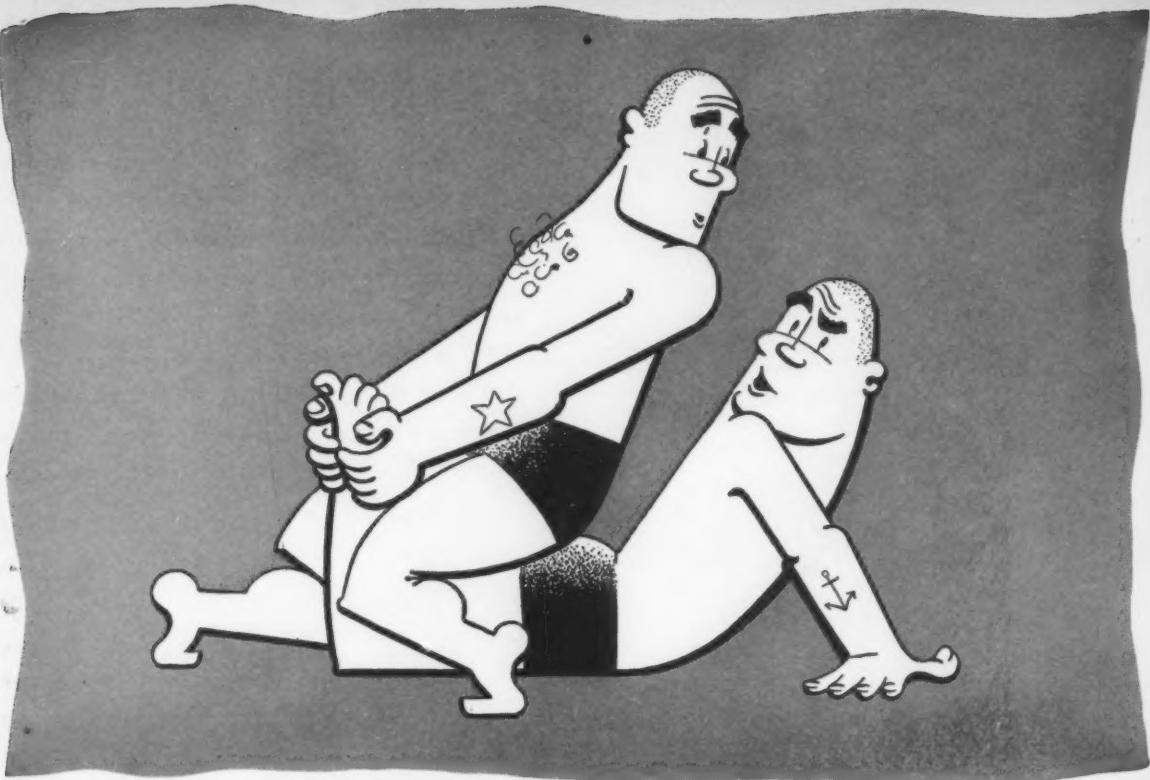
It's like that with mechanics, too. A kit of well kept tools, and every tool Class A, is a pretty sure sign of a Class A mechanic. Chances are the wrenches in that kit will be Bonneys.

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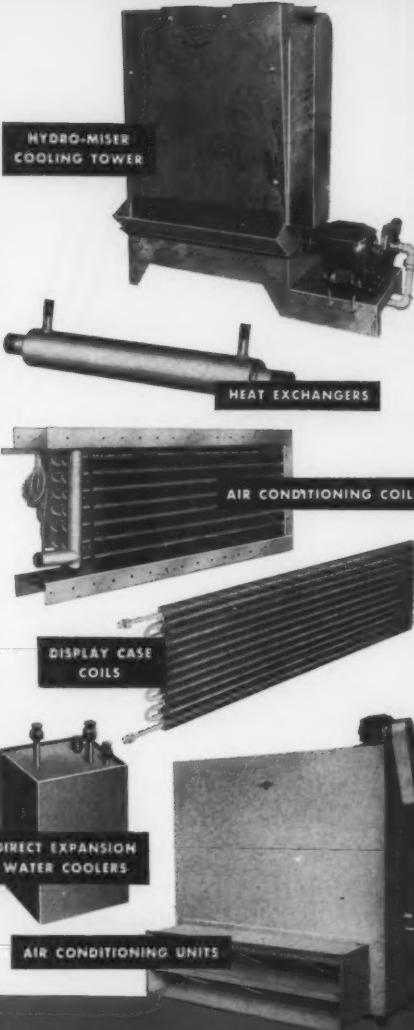
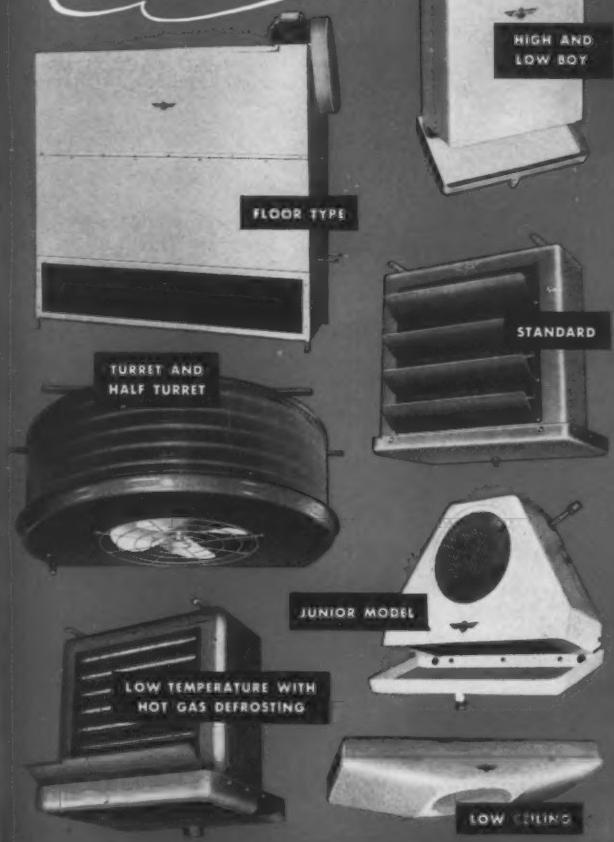
NOVEMBER, 1951 • COMMERCIAL REFRIGERATION

# LAKON

# is THE LINE

Of commercial and industrial refrigeration and air conditioning equipment

## HUMI-TEMP UNITS



Manufacturers of the original Cross-Fin Coil • Humi-Temp Units • Evaporative Condensers • Cooling Towers • Air Conditioning Coils • Air Conditioning Units • Direct Expansion Water Coolers • Heat Exchangers • Disseminator Pans

# LAKON COULE INC.

519 Memorial Drive, S.E. • Atlanta, Georgia • Main 3171



THE WATCHDOG OF THE NATION'S FOOD SUPPLY

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VISIT OUR BOOTH  
T23 - T25  
AT THE 7TH ALL-INDUSTRY  
REFRIGERATION & AIR CONDITIONING  
EXPOSITION  
NOVEMBER 5-6, 1951



# Thermopane

REGISTERED U. S. PAT. OFFICE

The acceptance of *Thermopane* insulating glass—Libbey·Owens·Ford's transparent insulating unit—has been tremendous. It is timely to emphasize the following:

1. *Thermopane\** is a registered trade-mark of the Libbey·Owens·Ford Glass Company;
2. Only Libbey·Owens·Ford makes *Thermopane* insulating glass;
3. Only Libbey·Owens·Ford can call a transparent insulating unit *Thermopane*;
4. Only *Thermopane* has the *Bondermetic Seal*\* which bonds the panes of glass into one unit to prevent dirt and moisture from entering the dry air space;
5. The name "*Thermopane*" can and should be used when referring to the L·O·F product only;
6. The word "*Thermopane*" should never be used when referring to any other brand of multiple-glazing construction.

We make these statements because the function of a trade-mark is to identify unequivocally the manufacturer of a product . . . and to eliminate the possibility of confusion in the mind of the public concerning the producer of a specified product . . . and to assure that the customer gets what he orders.

We are sure that architects, contractors and others who are familiar with the

superiority and advantages of *Thermopane* will welcome these statements . . . will refrain from using our trade-mark in referring to any construction or product not made by the Libbey·Owens·Ford Glass Company.

We believe that our readers will understand L·O·F's pride in *Thermopane* and our sincere desire to have *Thermopane* continue to enjoy its individuality.

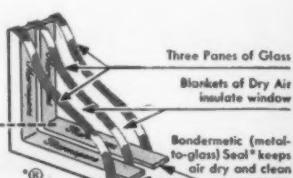
L I B B E Y · O W E N S · F O R D   G L A S S   C O M P A N Y  
T O L E D O   3 ,   O H I O



## Thermopane

FOR BETTER VISION SPECIFY THERMOPANE MADE WITH POLISHED PLATE GLASS

LOOK FOR THE NAME ON THE SEAL BETWEEN THE PANES



**BRUNNER**  
SINCE 1906

**REFRIGERATION** helps you serve better

**There are  
just two steps  
to closing more  
business**

**THE FIRST STEP IS—use this coupon**

*Just fill it in and mail it*

We will know this is your request for a Brunner factory representative to stop in and go over the reasons why Brunner dealers find it easier to close business.

Name \_\_\_\_\_

Company \_\_\_\_\_

Address \_\_\_\_\_

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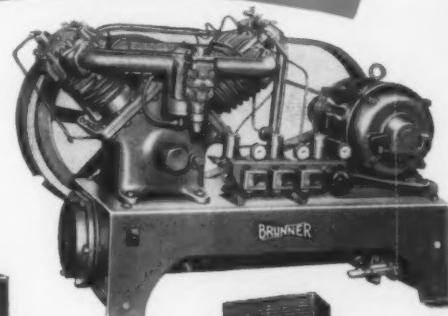
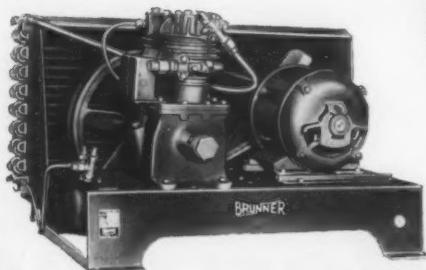
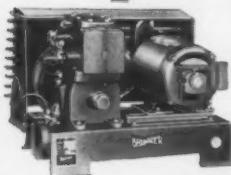
With all the facts fresh in mind you will recognize the second step—recommend and install Brunner's from now on. With 69 models comprising a complete range of commercial capacities and types, a

dependable source of supply and a known product with ready acceptance by your customers, selling obstacles are removed and you are on the way to bigger business. We will be looking for the coupon.

**BRUNNER MANUFACTURING COMPANY**  
Utica 1, New York, U. S. A.

**REFRIGERATION  
CONDENSING UNITS**  
...a size and type  
for every purpose

AIR AND WATER  
COOLED MODELS  
 $\frac{1}{4}$  HP. to 75 HP.



**BRUNNER**  
SINCE 1906

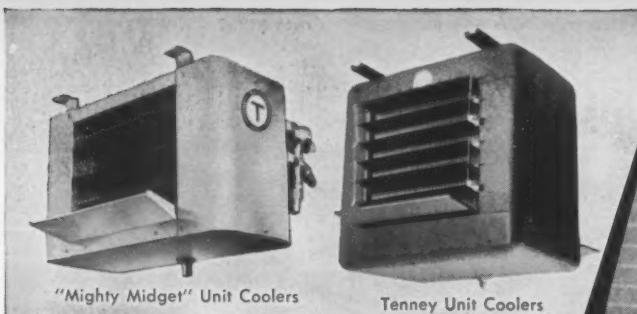
**BRUNNER**  
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**AIR CONDITIONING**

Self Contained Units in 4 sizes: 3-5- $7\frac{1}{2}$  and 10 HP.  
Remote Installation Types from 3 to 75 HP.



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and AIR CONDITIONING • NOVEMBER, 1951

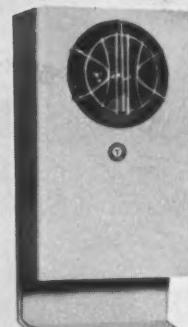


"Mighty Midget" Unit Coolers

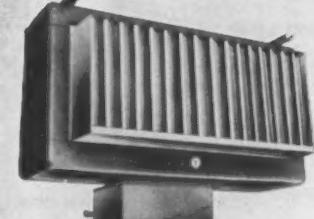
Tenney Unit Coolers



Drum Cooling Units



Wall-Mounted Panel Units



Evaporative Condensers Up To 60 Tons



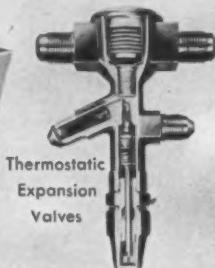
Finned Coils & Tenneyaire Pan



Finned Case Coils for  
Original Manufacturers & Replacement



Mullion  
Cooling Units



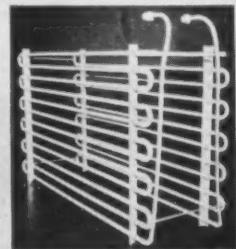
Thermostatic  
Expansion  
Valves



Kwik-Freeze Ice Makers



Tenney Cooling Towers



Beer Cooling Coils

# Tenney

## ENGINEERING Insures Quality

### Commercial Refrigeration and Air Conditioning

#### Units and Components

Tenney Engineering, Inc., are designers and builders of some of the most complex and accurately controlled ultra-low-temperature installations in use today by the armed services, government research divisions, and general industry. These precision-engineered systems are built to operate efficiently at temperatures down to  $-150^{\circ}\text{F}$ . for research, development, specification, and production applications.

In commercial refrigeration and air conditioning equipment also, a sure guarantee of satisfaction is the Tenney name on every complete unit or component you install. It stands for broad technical experience and engineering skill.

For our recommendations on the Tenney unit to meet your requirements, without obligation, please address Tenney Engineering, Inc., Dept. F, 26 Avenue B, Newark 5, N. J.



# Tenney

TENNEY ENGINEERING, INC.

26 Avenue B, Newark 5, New Jersey • Plants: Newark, N. J. and Baltimore, Md.

® 8174

ENGINEERS AND MANUFACTURERS OF LOW SIDE, AUTOMATIC TEMPERATURE, HUMIDITY, AND PRESSURE CONTROL EQUIPMENT

Circle No. 18 on Reader Service Card for more information

NOVEMBER, 1951 • COMMERCIAL REFRIGERATION

## LETTERS

### Textbooks for the Beginner . . .

EDITOR:

Please send me names of some good books on elementary refrigeration, and give address of where I may get these books.

ALLEN SIMMONS, JR.  
Columbia, Mississippi

Many good texts have been written on the fundamentals of refrigeration and we could not attempt to give a complete listing of them. The following, however, are a few of the better books of this nature which have come to our attention in recent years.

1. *Audel's Refrigeration and Air Conditioning Guide* by Edwin T. Anderson, published by Theo. Audel & Co., New York, N. Y.

2. *Basic Refrigeration and Air Conditioning* by Robert Henderson Emerick, published by Prentice-Hall, Inc., New York City.

3. *The Refrigeration Service Man's Manual* by Edward R. Magnus and Grace D. Marlott, published by Wilcox & Follett Co., Chicago, Ill.

4. *Drake Refrigeration Service Manual* by H. P. Manly, published by Frederick J. Drake & Co., Chicago, Ill.

Each of these books contains an intensive discussion of refrigeration fundamentals before going on into the more advanced problems and procedures.

### . . . and the Advanced Student

EDITOR:

We would appreciate your recommending a good Refrigeration Engineer's Handbook, which would include Theory, Practice, Formulas, and Reference Table, for both the beginner and the expert.

W.M. F. O'LOUGHLIN  
Sales Engineer  
Beverage Dispensing Div.  
Wooster Brass Co.  
Wooster, Ohio

A great many excellent texts have been published on refrigeration engineering and we could not begin to

recommend them all. However, here are a few of the outstanding ones which have come to our attention in recent years:

1. *Refrigeration and Air Conditioning Engineering* by D. F. Raber and F. W. Hutchinson, published by John Wiley & Sons, Inc., New York.

2. *Refrigeration and Air Conditioning* by Richard C. Jordan and Gayle B. Priester, published by Prentice-Hall, Inc., New York City.

3. *Refrigeration Engineering* by H. J. MacIntire and F. W. Hutchinson, published by John Wiley & Sons, Inc., New York, N. Y.

4. *The Refrigeration Data Book (Basic Volume)* published by The American Society of Refrigerating Engineers, New York, N. Y.

**A**n unpredictable cooling problem posed by heavy heat-producing calculating machines which may be moved from one part of a new insurance building to another, has been solved by an unusual mating of two different types of air conditioning apparatus.

The recently completed and completely air conditioned New Hampshire Fire Insurance Co. building, Manchester, N. H., has installed its I.B.M. calculating equipment in one of the rooms on the first floor.

But since the calculating machines are completely self-contained, they can be moved to other locations in the building, which would radically change the air conditioning load both in the space they were moved to and the room that was vacated.

To handle any possible future changes without alterations in the built-in central system air conditioning, two packaged air conditioners sized to take care of the heat from the calculating machines alone were prescribed. The air conditioning units, which are also completely self-contained, will be moved wherever the I.B.M. equipment goes. All other air conditioning loads in the three-story and basement building will be handled by a Carrier Conduit Weathermaster system.

### Wants Spray Milk Cooler

EDITOR:

We have been contemplating a trip into the states to see if we can buy a spray-type milk cooler. Would you have the names and addresses of the

"Prove the Need  
and the Sale  
Takes Care of  
Itself!"

FOR ACCURATE INFORMATION ON  
RELATIVE HUMIDITY and  
TEMPERATURE . . . RELY ON

**Bendix-Friez**

When your customers see the facts and figures, your selling job virtually disappears. With precision-made, dependable Bendix-Friez instruments you can demonstrate with on-the-spot readings or recordings exactly how much and where your customers need temperature and humidity control for maximum comfort in the home, maximum efficiency in industrial operations. Bendix-Friez instruments are built to U. S. Weather Bureau standards by the world's oldest and largest manufacturer of fine meteorological equipment. Write for complete information.

#### BENDIX-FRIEZ

#### MODEL 160

Portable Humidity and  
Temperature Recorder



3" x 5" charts, 10 or 30  
hour records. Modern de-  
sign . . . handy for small  
space and difficult loca-  
tions . . . built to meet  
unusual conditions.



**BENDIX-FRIEZ**

BENDIX-FRIEZ

#### Hygrodial

#### Precision Humidity and Temperature Indicator

Hair-operated and calibrated to profes-  
sional standards of accuracy by the man-  
ufacturer of the world's finest weather instruments.  
Handsome, modern case—4" high, 5½"  
wide, 1½" deep—desk or wall mounting.

#### FRIEZ INSTRUMENT DIVISION of

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Baltimore 4, Maryland

Export Sales: Bendix International Division  
72 Fifth Avenue, New York 11, N. Y.

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**SEE VICTORY EXHIBIT AT THE SHOW**  
November 5-8 • Booths 464-466



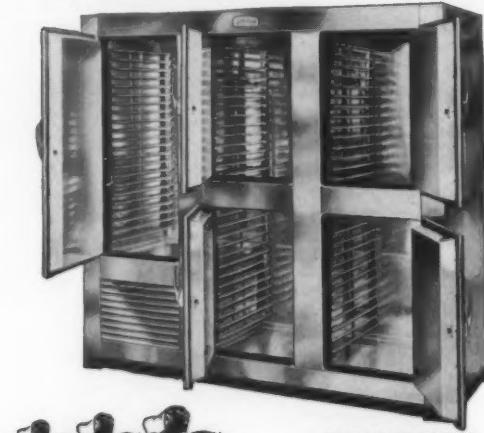
**Stainless Steel Refrigeration**

## Your Choice for EVERY PURPOSE

**STA-KOLD** builds value into every unit. For those who want streamlined smartness, dependable and economical operation at low-cost, STA-KOLD is the answer.



**Model RA-70-R**  
Available from 20 to 70 cu. ft.  
Remote and Self-Contained



**Model RD-65-S**  
Pioneers of Stainless Steel  
Refrigerated Cases  
For complete information write  
for catalog



DISTRIBUTORS IN ALL PRINCIPAL CITIES

**STA-KOLD  
PRODUCTS**  
Division of  
VICTORY METAL MANUFACTURING  
CORP.

1300 SOUTH FRONT ST.  
PHILADELPHIA 47, PA.

Circle No. 20 on Reader Service Card for more information

manufacturers of this type cooler, and we would write them for information before our trip in January or February. If there is a charge with this service please send it to me C.O.D.

KEN WINGER  
Jarvis, Ontario

*Here is a list of the names and addresses of spray-type milk cooler manufacturers. Haverly Electric Co., Inc., Syracuse 4, N. Y.; Emil Steinhorst & Sons, Inc., Utica 3, N. Y.; Wilson Refrigeration, Div. Tyler Fixture Corp., Smyrna, Del.; Esco Cabinet Co., West Chester, Pa., Refrigeration Specialties Div., Westinghouse Electric Corp., Springfield 4, Mass.*

### Plans Heat Pump System

EDITOR:

I am building a new shop and showroom, and I thought that I would like to try my luck with the new re-heat refrigeration system for heating the building.

Would you please put me in contact with some company who has had experience with these systems, who can give me some figures on the engineering and designing of these systems.

H. M. SCHUMACHER  
Schumacher Refrigeration  
Grangeville, Idaho

*We suggest that the best source of the information which you seek on the engineering and design of heat pump systems would be either of the following two books: Heat Pumps, by Sporn, Ambrose and Baumeister, published by John Wiley & Sons, Inc., New York, N. Y., price \$3.75; Heat Pump Application by Kemler & Oglesby, published by McGraw-Hill Book Co., New York, N. Y., price \$6.00.*

*Both of these books contain a great deal of basic and applied information on the design and installation of various types of heat pump systems and should provide you with most of the "facts and figures" which you would need in planning your own installation.*

**BUY FROM YOUR  
REFRIGERATION WHOLESALER**

# TYPES of TUBING for all INDUSTRY



Men who work with tubing know Papco tube tools are tube savers. Send for colorful literature showing how you can get more from your tubing allotment with Papco tube tools.

CHOOSING the right type of tubing is not as easy as A-B-C, for many important factors must be taken into consideration. The type may seem right, but the quality may vary—the wall may not be uniform—invisible properties may block production schedules. Standardize on Penn whose only aim is to draw the finest aluminum and copper tubing, precision made for your industry. Penn tubing is quality controlled and carefully engineered for perfect uniformity. Don't get the impression that quantities of Penn tubing are unlimited—but rest assured that your allotment of Penn tubing will be the only quality Penn draws—the finest. Plan Penn into your product now—write us your requirements and let us help you determine the type you need.



QUALITY TUBING HAS A "PENN NAME"

**PENN BRASS & COPPER COMPANY**  
ERIE • PENNSYLVANIA • TELEPHONE 3-1137

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and AIR CONDITIONING • NOVEMBER, 1951

# NOW CHOOSE...

# SERVEL SUPERMETIC

FOR EVERY COMMERCIAL  
REFRIGERATION AND AIR CONDITIONING NEED

Every model factory warranted

Five years on steel case sizes through 1 H.P.

One year on larger sizes through 3 H.P.

## AIR-COOLED MODELS

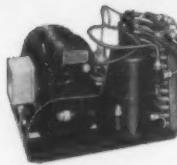
for Medium or Low Temperature Applications



**1/4 H.P. SERVEL**  
10½ in. high,  
17¾ in. long, 13 in. wide



**1/2 H.P. SERVEL**  
10½ in. high,  
18½ in. long, 13 in. wide



**1/2 H.P. SERVEL**  
12 in. high,  
20 in. long, 14½ in. wide



**3/4 H.P. SERVEL**  
12½ in. high,  
16½ in. long, 17¾ in. wide



**1/2 H.P. SERVEL**  
13½ in. high,  
19½ in. long, 16½ in. wide



**HEAVY DUTY 1/2 H.P.**  
13½ in. high,  
20½ in. long, 16½ in. wide



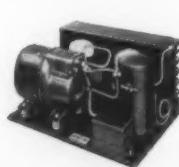
**1 H.P. SERVEL**  
12½ in. high,  
18½ in. long, 16½ in. wide



**1 1/2 H.P. SERVEL**  
22 in. high,  
29 in. long, 15 in. wide



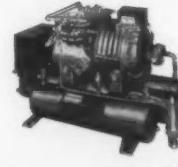
**3/4 H.P. SERVEL**  
13½ in. high,  
26 in. long, 19½ in. wide



**1 H.P. SERVEL**  
13½ in. high,  
26 in. long, 21½ in. wide



**2 H.P. SERVEL**  
23 in. high,  
29 in. long, 17 in. wide



**3 H.P. SERVEL**  
21 3/16 in. high,  
36 3/8 in. long, 20 3/8 in. wide



**1 1/2 H.P. SERVEL**  
22½ in. high,  
29½ in. long, 24½ in. wide



**2 H.P. SERVEL**  
23 in. high,  
33 in. long, 24 in. wide

**Servel**  
ELECTRIC REFRIGERATION DIVISION  
EVANSVILLE 20, INDIANA

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NOVEMBER, 1951 • COMMERCIAL REFRIGERATION



NO HELP  
NEEDED

WHEN YOU USE  
"EASY TO FABRICATE"  
**VIKING COPPER TUBE**

For Viking Tube is easy to bend and flare. Its uniform temper insures speedy, efficient, trouble-free fabrication and strength where strength is needed.

ELECTRIC ANNEALING INSURES UNIFORM QUALITY

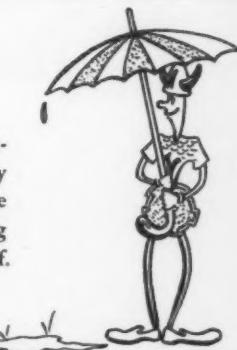
**PLIABILITY**

Viking Copper Tube is soft. It can be formed easily without danger of fracturing or splitting.



**CLEAN AND DRY**

Viking Copper Tube is triple-sealed. It is bright, bone-dry and dirt-free. The seal is made to pass through any opening large enough for the tube itself.



Be sure to visit the VIKING Booth at the R-E-M-A Exposition



**VIKING** Copper Tube Co.  
CLEVELAND 10, OHIO

**PRECISION DRAWN SEAMLESS COPPER AND ALUMINUM TUBE**

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and AIR CONDITIONING • NOVEMBER, 1951

# What the serviceman should know about "VIRGINIA" REFRIGERATION products

TO CHARGE A SYSTEM, USE REFRIGERANTS THAT ARE  
CONSISTENTLY PURE, CONSISTENTLY SURE



## "ENAMELITE"® the asphaltic mastic

- for installing insulating materials
- as a surface coating

Pour and mix—that's all there is to it. "Enamelite" is an asphaltic mastic that doesn't have to be heated. It sticks to any dry surface and makes an excellent vapor seal. It is excellent for application to corkboard, Fiberglas, Styrofoam, Celotex. "Enamelite" can also be used as a plaster

finish on the exposed surface of insulation board when it is troweled on and applied in two coats. After the initial set, a perfectly smooth finish can be obtained by dashing water on it and troweling in one direction. There's nothing better for quick reconditioning jobs.

SEE YOU IN CHICAGO AT BOOTH 233

**ASK YOUR WHOLESALER  
OR WRITE**  
**VIRGINIA SMELTING  
COMPANY**

WEST NORFOLK, VIRGINIA

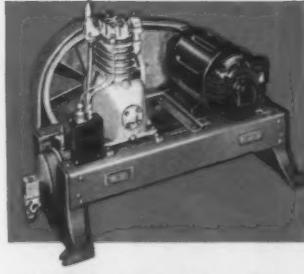
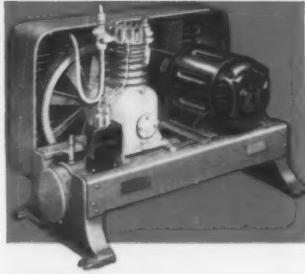
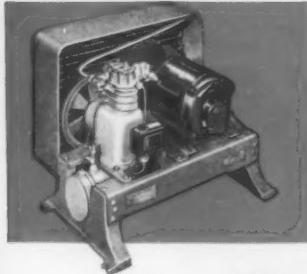
PHILADELPHIA • NEW YORK • BOSTON  
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**VIRGINIA**  
**Refrigerants**

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NOVEMBER, 1951 • COMMERCIAL REFRIGERATION

# MILLS COMPRESSORS AND CONDENSING UNITS

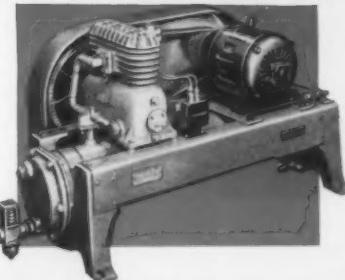
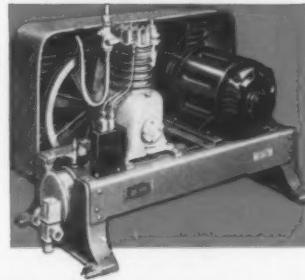
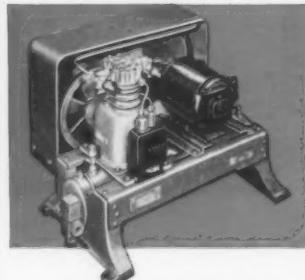


## AIR-COOLED UNITS

	1/4 H.P.	1/3 H.P.	1/2 H.P.	3/4 H.P.	1 H.P.	1 1/2 H.P.	2 H.P.	3 H.P.
Width	26"	26"	30 1/2"	36 1/2"	36 1/2"	42 3/4"	42 3/4"	42 3/4"
Depth	18"	18"	21 1/2"	23"	23"	25 1/2"	26 1/2"	26 1/2"
Height	17"	17"	19 1/2"	24"	24"	31 1/2"	31 1/2"	31 1/2"
Net Weight	142 lbs.	146 lbs.	200 lbs.	276 lbs.	286 lbs.	450 lbs.	460 lbs.	470 lbs.

## WATER-COOLED UNITS

	1/3 H.P.	1/2 H.P.	3/4 H.P.	1 H.P.	1 1/2 H.P.
Width	33 1/2"	33 1/2"	39"	39"	39"
Depth	17"	17"	18 1/2"	18 1/2"	21 1/4"
Height	19 1/2"	19 1/2"	24"	24"	24"
Net Wt.	188 lbs	194 lbs	265 lbs	272 lbs	435 lbs



## COMBINATION AIR- AND WATER-COOLED UNITS

	1/2 H.P.	3/4 H.P.	1 H.P.	1 1/2 H.P.	2 H.P.	3 H.P.
Width	33 1/2"	39"	39"	47 1/4"	47 1/4"	53"
Depth	21 1/2"	23"	23"	25 1/2"	25 1/2"	26 1/2"
Height	19 1/2"	24"	24"	31 1/2"	31 1/2"	31 1/2"
Net Weight	212 lbs.	292 lbs.	306 lbs.	470 lbs.	482 lbs.	492 lbs.

## WATER-COOLED UNITS (Continued)

	2 H.P.	3 H.P.	5 H.P.	7 1/2 H.P.	10 H.P.
Width	47 1/4"	53"	63"	63"	63"
Depth	21 1/4"	21 1/4"	29 1/2"	29 1/2"	30"
Height	29 1/2"	29 1/2"	32"	32"	34"
Net Wt.	445 lbs	455 lbs	895 lbs	945 lbs	1050 lbs



## CLOSE-COUPLED UNITS

	1/4 H.P.	1/3 H.P.	1/2 H.P.
Width	19 1/4"	19 3/4"	22"
Depth	16 1/4"	18"	18"
Height	14 1/4"	14 1/4"	14 1/2"
Net Weight	106 lbs.	118 lbs.	159 lbs.



New illustrated Catalog 204-1 is a handy and complete guide to Compressor and Condensing Unit selection. Have you a file copy?

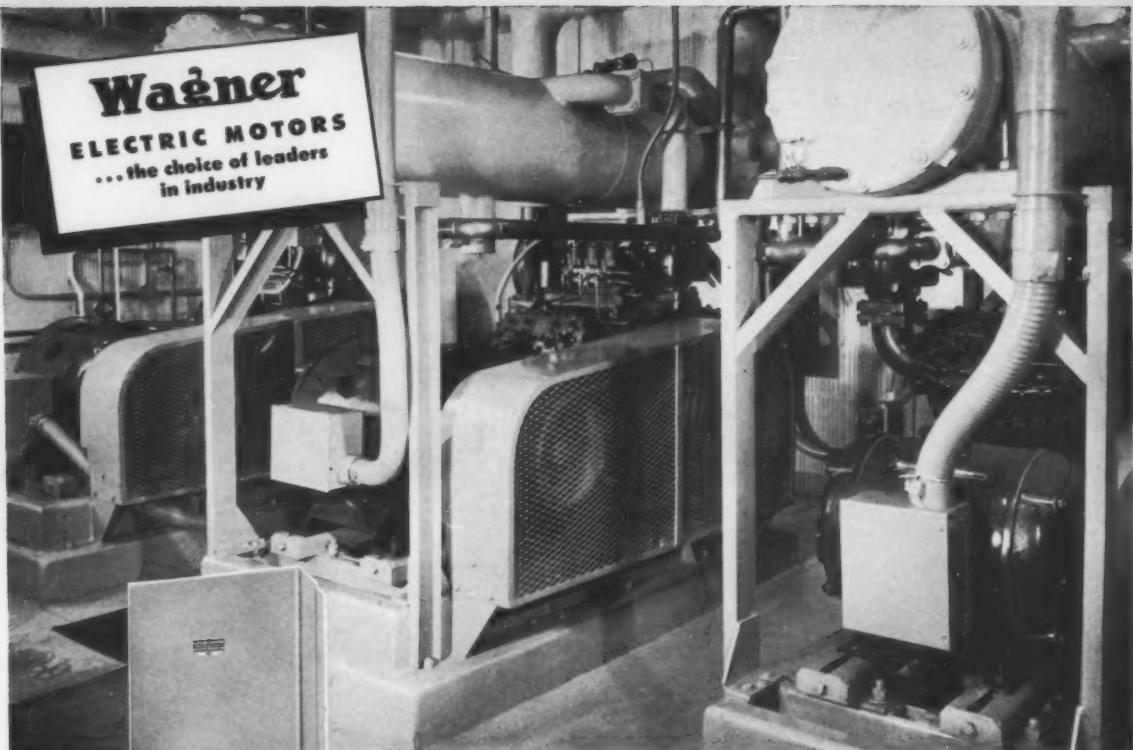
## THERE'S A MILLS FOR EVERY INSTALLATION

The Mills Condensing Unit was born in 1935 and first used in the Mills Counter Ice Cream Freezer as well as the Mills Beverage Cooler. The tremendous growth and success of these two major divisions of our business were based upon the performance of this unit. Since then Mills Units of all capacities have been widely used for cooling, refrigeration, and air-conditioning systems with proven success.

Mills engineering incorporates all the progressive improvements of refrigeration science. All units have a one-piece compressor body and a positive oil return system. Functionally designed, employing the highest quality of selected materials, and manufactured to the closest possible tolerances by skilled craftsmen, Mills Condensing Units prove their excellence through performance.

MILLS INDUSTRIES, Incorporated, 4100 Fullerton Ave., Chicago 39, Illinois

Circle No. 25 on Reader Service Card for more information  
and AIR CONDITIONING • NOVEMBER, 1951



*Reduce starting current draw  
the economical way  
with the **Wagner**  
**Increment Motor and Starter Combination***

On any application where reduced current draw at start is required because of locked current restrictions, you can limit the in-rush of motor current during the starting period with the low cost Wagner Increment Motor and Starter "Package."

A typical installation is shown in the photograph above, where three Wagner open-type general purpose motors rated 60, 100, and 125 hp are driving Worthington air conditioning units in a Minneapolis office building.

The Wagner Motor-Control Package is economi-

cal to install and permits the use of high grade magnetically operated control equipment at a low purchase price. For special requirements, the motor-control combination can be furnished with Wagner normal or high torque explosion-proof motors, splash-proof motors, or totally-enclosed fan-cooled motors as well as with the open type motor.

Why not investigate this Wagner combination today? Write for full information, or consult the nearest of Wagner's 31 branch offices, located in all principal cities.

**Wagner**  
Electric Corporation  
1891 1951

MSI-17

**WAGNER ELECTRIC CORPORATION**  
6442 Plymouth Ave., St. Louis 14, Mo., U.S.A.

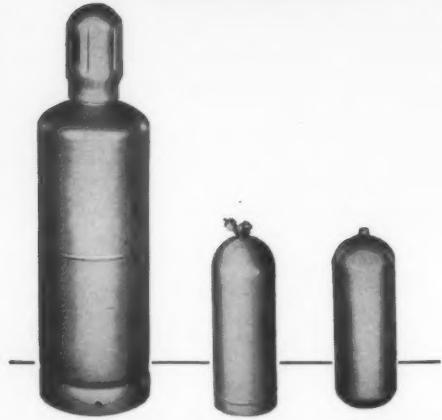
ELECTRIC MOTORS • TRANSFORMERS • INDUSTRIAL BRAKES  
AUTOMOTIVE BRAKE SYSTEMS — AIR AND HYDRAULIC

BRANCHES IN 31 PRINCIPAL CITIES

SEE OUR EXHIBIT—BOOTH NO. 234

Circle No. 26 on Reader Service Card for more information

**SPECIFY**  
**Prest-O-Lite**  
Trade-Mark  
**CYLINDERS**



PREST-O-LITE cold-drawn cylinders for refrigerant gases are available in 5-lb. (rounded bottom or with foot ring), 10-lb., 25-lb., and 35-lb. sizes. You can have 50-lb., 100-lb., 150-lb., or special sizes and designs quickly made to your specifications.

You save money in the long run when you insist on the best cylinders. Fill in the coupon below and mail it today for more information about PREST-O-LITE cylinders that will meet your needs.

## For Refrigerant Gases Because You Get...

- ① **Uniform Wall Thickness**—Unusually close tolerances in wall thickness assure you a superior cylinder.
- ② **Long Life**—Years of extra service and added protection against denting, piercing, corrosion, and pitting result from the thicker walls and rugged construction.
- ③ **Light Weight**—You cut transportation costs because there are no extra-thick sections which only add weight without adding strength.
- ④ **Maximum Safety**—All cylinders are tested for leakage with dry air, in addition to standard safety tests.
- ⑤ **Benefit of Years of Experience**—Unsurpassed design and production come from more than 35 years of experience and skill in the development, manufacture and use of compressed gas cylinders.
- ⑥ **More Than Code Requirements**—You know PREST-O-LITE cylinders will never let you down because they're made, tested, and inspected not only in accordance with I.C.C. Specifications but also undergo many rigid tests far beyond these requirements.

### LINDE AIR PRODUCTS COMPANY A DIVISION OF UNION CARBIDE AND CARBON CORPORATION

30 East 42nd Street I.C.C. New York 17, N. Y.

Offices in Other Principal Cities

In Canada: DOMINION OXYGEN COMPANY, LIMITED, Toronto

The term "Prest-O-Lite" is a registered trademark of Union Carbide and Carbon Corporation.

LINDE AIR PRODUCTS COMPANY  
30 East 42nd Street  
New York 17, N. Y.

Please send full information about PREST-O-LITE cylinders for refrigerant gases.

NAME.....

COMPANY.....

ADDRESS.....

R-17

MAIL THIS  
COUPON  
NOW!

**United**  
FOR Quality  
AND Economy

**UPRIGHT FREEZER**

15 Cubic Feet

Scientific placement of cooling coils, two separate food compartments, dual doors to minimize cold loss, insure balanced freezing at minimum cost.



**DRY KOOL BOTTLE COOLER**

World famous for performance and design. 14 models to meet all requirements in stainless steel or brown Dulux finish.



**KOOLMASTER DIRECT DRAW**

Engineered to serve beer to the "Brewmaster's" taste. Its smart appearance enhances any establishment. Choice of 8 models in stainless steel or brown Dulux finish.



**KUBEMASTER ICE CUBE MAKER**

Whenever food or refreshment is served, ice cubes as you need them. Choice of 3 beautiful models.



**REACH-INS**

Modern flush fronts with recessed handles in popular sizes. Ten models to choose from. Available in white Dulux, stainless steel fronts and glass doors.



DESIGNED—ENGINEERED—MANUFACTURED  
By  
**UNITED REFRIGERATOR COMPANY**  
Locust and Walnut Sts.  
HUDSON, WISCONSIN

Circle No. 28 on Reader Service Card  
28



# Over the COUNTER

## Help Yourself—and Your Supplier— By Rating All Possible Orders

MANUFACTURERS of component parts for refrigeration supplies are faced with a serious shortage of raw materials unless the entire refrigeration industry, at all trade levels, cooperates with the manufacturers by placing a rating or CMP symbol on each order they issue for materials.

The NPA has provided the refrigeration industry with ratings MRO or DO-MRO under CMP 5, RE or DO-RE under CMP-7 to cover purchases of materials for refrigeration repairs and replacement purposes. It is of vital importance that these ratings be certified on all purchase orders to enable manufacturers to replace raw materials for continued manufacture of their products.

These ratings have been made available to the trade, but in many instances they are entirely overlooked and are not being used. The service engineer or contractor should pass these rated orders on to the wholesaler, who in turn passes them along to the manufacturer for use in purchasing more material.

The huge rearmament program will consume great quantities of scarce materials—particularly steel, copper and aluminum. As refrigeration parts and supplies are made almost entirely from these metals, it is not difficult to realize that every possible effort is necessary to help maintain a continued flow of these metals to our manufacturing sources. It is up to each individual in our industry to use these ratings at every opportunity, to help keep products available for future use.

The government recognizes the importance of refrigeration as a defense-supporting industry. They have, ac-

cordingly, provided the tools in the form of ratings to enable us to keep our industry going during this period. It is up to you to use these ratings now, and on every order where they can be used. It is your insurance to continue in business for the next several years.

If you do not clearly understand the use of ratings on your orders,



"He came here 6 months ago to install our air conditioners—and he just forgot to go home!"

talk to your wholesaler about them. He can furnish the necessary information to guide your usage of these ratings.

The rated orders you turn in now greatly influence the amount of raw materials available for refrigeration parts in 1952. Don't wait until parts are no longer available. Take steps to insure a continued flow of these parts for your use later on. The going will get tougher as we enter the year 1952. Do your part now.

**BUY FROM YOUR  
REFRIGERATION WHOLESALER**

# JE

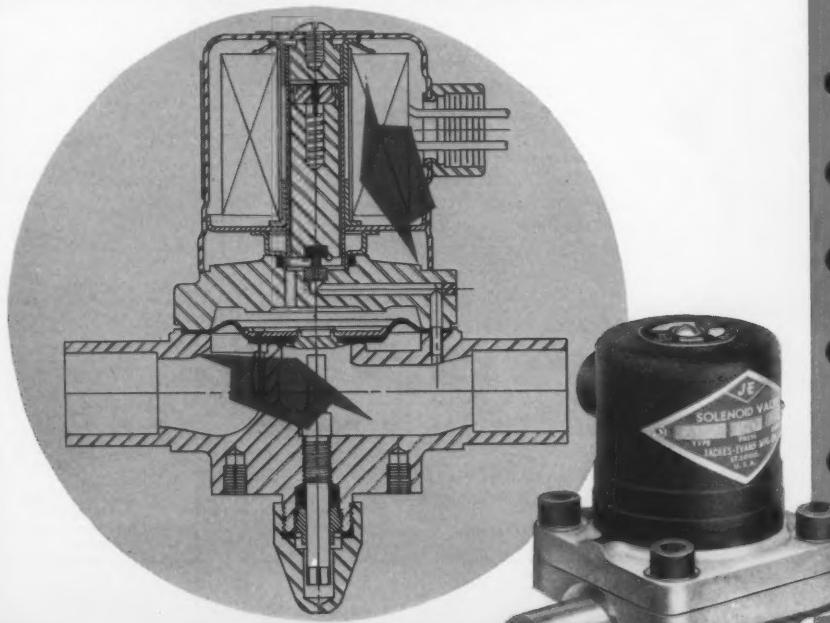
# SOLENOID VALVES

Made Better  
to Serve Better

A Series of Dependability Features

## No. 2 SIMPLICITY

- There are only two moving parts in JE Solenoid Valves; the main diaphragm and the plunger. There is no impact action in the opening of the valve, and consequently no loose mechanical linkage to create noisy valve action.



JACKES-EVANS

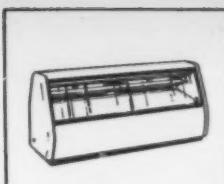
MANUFACTURING COMPANY  
CONTROLS DIVISION  
4427 GERALDINE AVE. • ST. LOUIS 15, MO.

## SOLENOID VALVES

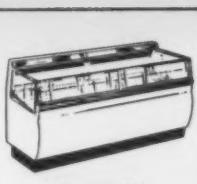
Have 5 Major  
Features of  
Dependability

- 1 TIGHT SEATING  
No bubble tolerance
- 2 SIMPLICITY  
Only two moving parts
- 3 LONG LIFE  
Cool coils
- 4 DURABILITY  
All corrosion-resistant  
materials
- 5 OPENING  
PRESSURE  
DIFFERENTIAL  
Higher than most  
others on the market.

May we submit samples  
for your test and ap-  
proval? Write today for  
details.



**DISPLAY MASTER**  
Service meat case.



**MEAT-MASTER**  
Rear or front loading self-service meat case.



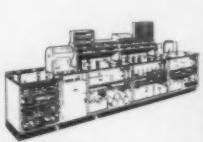
**MULTI-DECK**  
Double-deck dairy, delicatessen and self-service meat case.



**MULTI-SPECIAL**  
Mobile, two-deck dairy and delicatessen case.



**SUPER SERV-MASTER**  
Double-duty refrigerated and  
non-refrigerated produce cases.  
(Storage below.)



**PRE-PACKAGING FIXTURES**  
For meat, delicatessen, cheese  
produce.



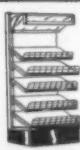
Only WEBER makes  
such a complete line  
of grocery store  
equipment



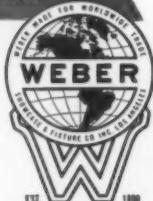
**WEBER CHECK STANDS,  
TURNSTILES AND RAILING**  
Designed for fast check-out;  
efficient traffic control.



**SODA FOUNTAINS**  
Economy and Premier Bobtais.  
(Self-contained and remote.)



**"SW" SHELVING**  
Sectional wall fixtures designed  
to merchandise all  
types of package goods.



EST. 1900

WORLD'S FOREMOST DESIGNER AND MANUFACTURER OF COMMERCIAL REFRIGERATION

**WEBER**  
showcase & fixture co., inc., los angeles

See you at the Weber booth (No. 533)  
at the All-Industry Exposition

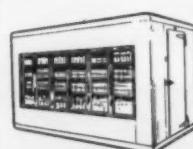
**DEALER INQUIRIES ARE INVITED**



**"SG" GONDOLAS**  
Single or double gondolas in 3-foot  
sections; easily adjustable shelves.



**BAKERY CASES**  
Display cases and back bars.  
(Refrigerated and non-refrigerated.)



**WALK-IN COOLERS**  
Sectional walk-in coolers,  
with or without reach-in front.



**SPOT-RITE**  
Mobile ice cream and frozen food  
case, with related-item superstructure.  
(Self-contained.)



**DISPLAY-RITE**  
Ice cream and frozen food case,  
with related-item superstructure.  
(Self-contained.)

Circle No. 30 on Reader Service Card for more information

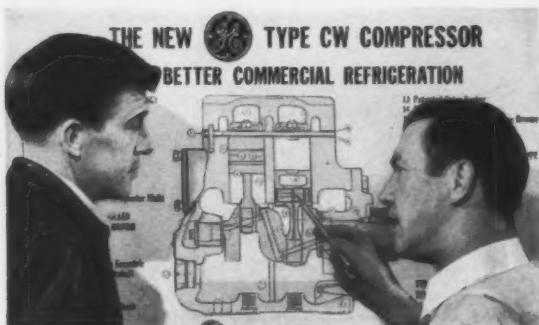


CONDENSING UNITS

# 4 WAYS G-E WHOLESALERS HELP YOUR BUSINESS



**ONE-STOP SERVICE.** You get efficient, over-the-counter service on all refrigeration needs—G-E condensing units, renewal parts as well as refrigerant gas, controls, tubing, valves, tools. No need to make several calls...one stop and you're in business.



**EXPERIENCE AT YOUR CALL.** Ask your G-E Parts Depot counter-man to help solve those pesky installation problems. He knows how to select the right units for the job, where to look for trouble-spots in an installation, what controls are needed.



**AMPLE STOCKS.** You'll find G-E open-type units from  $\frac{1}{4}$  to 10 hp, G-E hermetics from  $\frac{1}{6}$  to  $\frac{1}{2}$  hp, G-E compressor bodies from  $\frac{1}{6}$  to 10 hp, and a full line of renewal parts. Let G. E.'s famous name and performance record help you sell your customers.



**TIME SAVED.** No longer need you and your customers suffer that exasperating wait for "factory delivery." Anywhere in the U. S., your G-E Parts Depot is usually as close as an easy ride in your repair truck, at most, within one day's express travel.

Write for **FREE** data!

You can put your confidence in—

**GENERAL ELECTRIC**



General Electric Company  
Air Conditioning Division, Sec. CR-15  
Bloomfield, New Jersey

Tell me the location of the G-E Parts Depot nearest me  Please send me literature on G-E Open Units  G-E Hermetics  G-E Renewal Parts

NAME.....

ADDRESS.....

CITY..... ZONE..... STATE.....

your wholesaler can  
do the whole job  
with **SUPERIOR**



You'll find that your next refrigeration or air conditioning job will run smoother and last longer if you let your wholesaler supply you with a complete line of Superior valves and accessories.

Many others have found that Superior engineered products save them time and money in installation and repair costs when they are used as initial equipment on the job. Globe valves, Line valves, Economizers, Driers, Sight Glasses and a host of quality Superior products are made in a number of types and sizes assuring good performance in any size refrigeration system. Remember always to specify Superior for all your new equipment and replacement parts—and let your local wholesaler do the entire supply job.

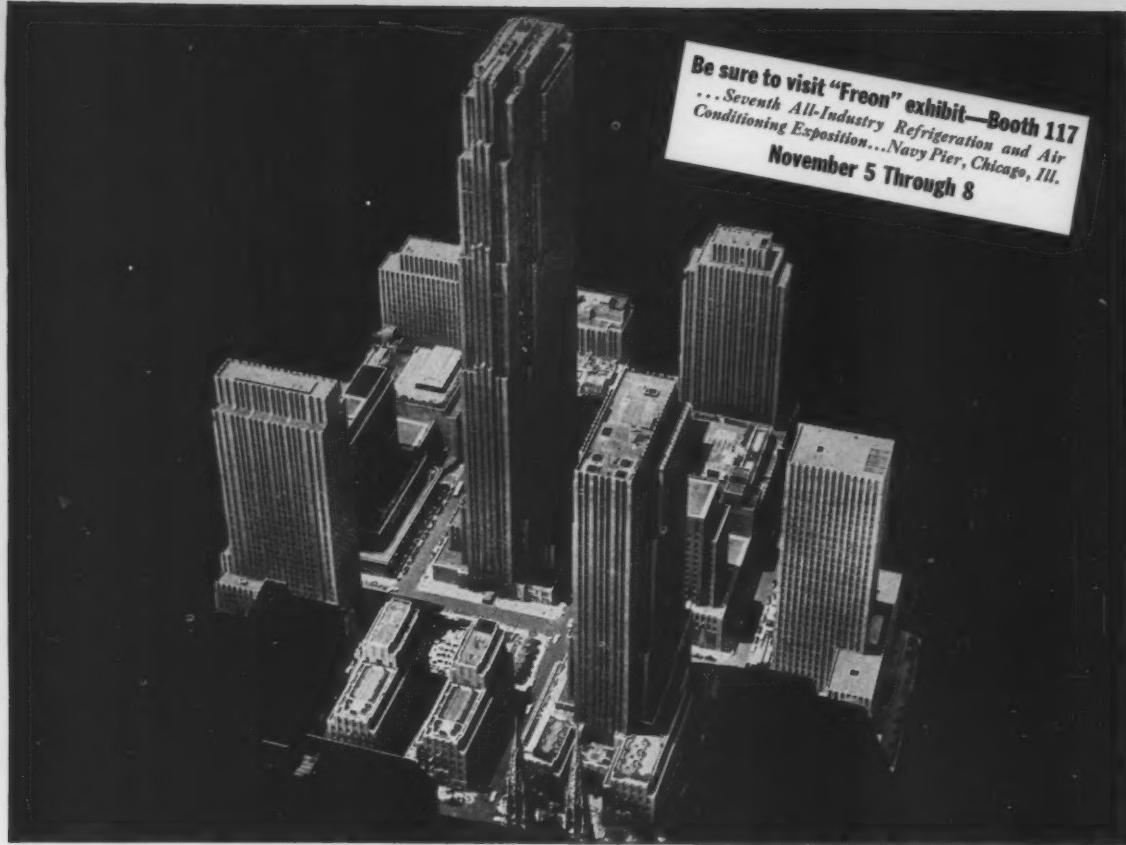
**Superior** *valve and fittings co.*



Pittsburgh 26, Pa.

Circle No. 74 on Reader Service Card for more information

NOVEMBER, 1951 • COMMERCIAL REFRIGERATION



Be sure to visit "Freon" exhibit—Booth 117  
 ... Seventh All-Industry Refrigeration and Air  
 Conditioning Exposition...Navy Pier, Chicago, Ill.  
 November 5 Through 8

## World-Famed "City Within a City"

*... Air conditioned with "Freon"-operated equipment*

Rockefeller Center in the heart of New York's Manhattan is the largest privately owned business and entertainment center in the world. Begun in 1931, it now consists of 15 huge buildings, occupying more than 12½ acres. The RCA building, dominating structure in "Radio City," towers 70 floors . . . 850 feet above street level.

Throughout this fabulous Center more than 2,000,000 sq. ft. of floor area is completely air conditioned with equipment using "Freon" safe refrigerants—and these machines dependably produce over 8,000 tons of refrigeration!

Because "Freon" refrigerants are recognized by architects and engineers everywhere as the most suitable for serving the public, it was a logical decision to install air conditioning equipment that is "Freon"-operated. These refrigerants are nonflammable, nonexplosive, practically nontoxic . . . harmless to foods, furs, fabrics or finishes.

"Freon" refrigerants meet all safety requirements of city codes everywhere. In addition, the uniformity of these refrigerants insures the efficient and economical performance of air conditioning systems over long periods of time . . . good reason why most equipment selected for today's modern structures is designed to use these superior refrigerants. E. I. du Pont de Nemours & Co. (Inc.), "Kinetic" Chemicals Division, Wilmington 98, Delaware.



A small part of the equipment installations necessary to air condition buildings in Rockefeller Center.



BETTER THINGS FOR BETTER LIVING . . . THROUGH CHEMISTRY



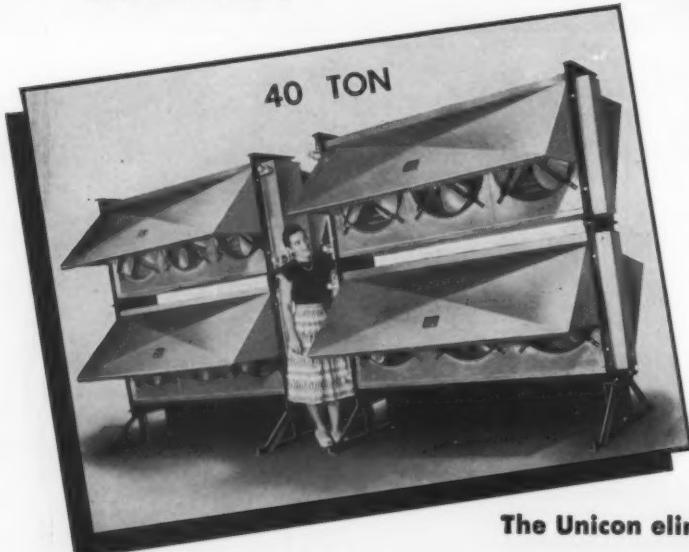
**FREON**  
SAFE REFRIGERANTS

"Freon" is Du Pont's registered trade-mark  
for its fluorinated hydrocarbon refrigerants.

Circle No. 33 on Reader Service Card for more information  
**and AIR CONDITIONING • NOVEMBER, 1951**

*Any* SIZE COMPRESSOR  
CAN BE  
**AIR COOLED**  
WITH  
**UNICON**

WITHOUT  
THE USE OF ANY  
WATER!



by  
**KRAMER**

**REMOTE TYPE**  
**AIR COOLED CONDENSER**

For capacity greater than  
10 ton, 2 or more Unicons  
are used. Mounting stands,  
hoods, and wind deflectors  
are available for  
simplified outside mounting.

**The Unicon eliminates all water problems!**

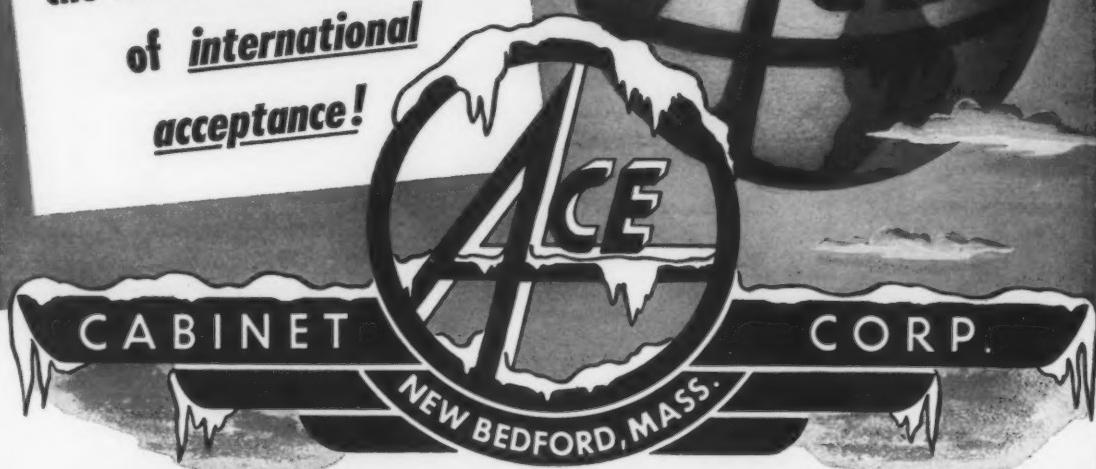
WRITE FOR BULLETIN U-177-S

SPECIAL APPLICATIONS — Write to  
us about your condensing problem.

**KRAMER TRENTON CO. • Trenton 5, N.J.**

Circle No. 34 on Reader Service Card for more information

Our name on thousands  
of low temperature cabinets  
in operation throughout  
the world is proof-positive  
of international  
acceptance!



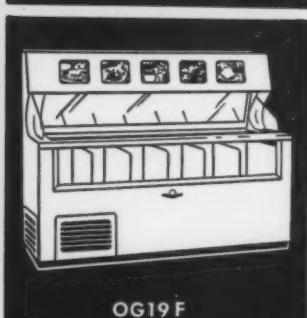
SG15



OG11F



SG26



OG19 F

WORLD-WIDE acceptance of ACE equipment was not accomplished overnight. This took years. We built our cabinets with the full confidence that they would do the selling job for you. The name "ACE", is a respected brand, internationally recognized as THE cabinet that represents all 6 vital factors that make for a perfect unit . . . 1—design, 2—styling, 3—engineering, 4—construction, 5—performance, 6—price.

See America's leading low-temperature cabinet line in booths 313-315-317, at the 7th All-Industry Refrigeration & Air Conditioning Exposition, at Navy Pier in Chicago, week of Nov. 5th.

## Ace Cabinet Corp. New Bedford, Mass.

Please address all inquiries to: Exec. Sales Office:  
1457 Broadway • New York 18, N. Y.  
Export Dept.: 39 Broadway, New York 6, N. Y.

Manufacturers of Frozen Food Display Cabinets, Ice Cream Dispensing Cabinets, Farm Freezers and Bobtails.

Circle No. 35 on Reader Service Card for more information  
and AIR CONDITIONING • NOVEMBER, 1951



## "the destructive pair" that cripple **PRESSURE-LUBRICATED COMPRESSORS**

It's a sad story when either of "the destructive pair" . . . low oil pressure or slow pickup of oil pressure . . . go to work on a pressure-lubricated compressor. When that happens, damage to seals and bearings may result, even in the best of refrigeration compressors.

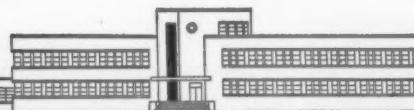
But, you can stop "the destructive pair" from their crippling work with the new PENN Series 275 Oil Protection Control with built-in Time Delay Switch.

Here's how it works. When compressor starts, if the oil pressure does not build up to the proper point within a safe time period, the PENN 275 stops the compressor *automatically* before damage can occur. If oil pressure drops below a safe minimum during

the running cycle . . . and does not rise to normal within the time delay period . . . the control stops compressor operation. Thus, the compressor never operates more than the predetermined safe time on subnormal oil pressure. Result? Positive, automatic protection at all times!

Investigate this new, low-cost protection for refrigeration compressors or for other pressure-lubricated equipment. For complete information ask your compressor manufacturer or wholesaler or write **Penn Electric Switch Co., Goshen, Indiana**. Export Division: 13 E. 40th Street, New York 16, N. Y., U. S. A. In Canada: Penn Controls Limited, Toronto, Ontario.

# PENN



## AUTOMATIC CONTROLS

FOR HEATING, REFRIGERATION, AIR CONDITIONING, PUMPS, AIR COMPRESSORS, ENGINES, GAS RANGES

Circle No. 36 on Reader Service Card for more information

***"This show, more than ever before, will present many new and outstanding scientific developments in the field of refrigeration and air conditioning."***

**W. A. SIGFRIED, president  
Refrigeration Equipment Manufacturers Association**



***"This will be the greatest show ever held in the mechanical refrigeration and air conditioning industry."***

**L. C. MCKESSON, chairman  
7th All-Industry Show Committee**

## **The 7th All-Industry Refrigeration and Air Conditioning Exposition**

will open its doors to the industry and to those interested in the products of the industry on Monday, Nov. 5, at the Navy Pier, Chicago.

The Refrigeration Equipment Manufacturers Association, sponsor of the 7th All-Industry Exposition, extends a cordial invitation to everyone identified with the industry or planning to buy commercial refrigeration or air conditioning equipment, to visit the Show. There is no charge for admission.

This year's Show will be the largest, most complete exhibit of refrigeration and air conditioning equipment ever assembled. Some 200 manufacturers will be represented, and products displayed will range from the largest walk-in coolers, commercial refrigerators and air conditioning equipment to all types of component parts and accessory equipment.

Here, in four short days, Show visitors will see all of this equipment, and will have an opportunity to learn more about the proper merchandising, installation and servicing of it, from the manufacturers' sales, engineering and production men who are in attendance. Visitors will be able to contact customer and supplier alike, for many of the industry associations are holding meetings in connection with the Show. Their programs are reported in detail elsewhere in this issue.

If you're in the refrigeration and air conditioning industry in any capacity, this is *your* Show. We'll see you there! But if you can't make the trip to Chicago, just start turning the pages of this "Tell-All" issue. Short of the Show itself, this issue will give you the most complete information possible on the industry's products and prospects for 1952.

# Time Table of Show Week Activities

## EXHIBIT HOURS

The 7th All-Industry Exposition will be open during the following hours:

**MONDAY, Nov. 5—2 p.m. to 10 p.m.**

**TUESDAY, Nov. 6—10 a.m. to 6 p.m.**

**WEDNESDAY, Nov. 7—12 noon to 10 p.m.**

**THURSDAY, Nov. 8—10 a.m. to 4 p.m.**

### Saturday, November 3

9:00 a.m. to  
6:00 p.m.—Exposition Registration, Navy Pier

9:00 a.m.—RSES Registration, Morrison Hotel

1:00 p.m. to

5:00 p.m.—RSES General Business Meeting, Morrison Hotel

9:00 a.m.—RACCA 6th Annual Convention, Knickerbocker Hotel

12:30 p.m.—RACCA luncheon, Knickerbocker Hotel

2:30 p.m.—RACCA 6th Annual Convention, Knickerbocker Hotel

### Sunday, November 4

9:00 a.m. to  
6:00 p.m.—Exposition Registration, Navy Pier

8:00 a.m.—RSES Registration, Morrison Hotel

9:00 a.m.—RSES Educational Program, Morrison Hotel

10:00 a.m.—RACCA Membership Meeting and Election of Officers, Knickerbocker Hotel

10:00 a.m.—REWA Board of Directors Meeting, Sheraton Hotel

1:00 p.m.—RSES Educational Program, Morrison Hotel

7:00 p.m.—NCRSA Board of Directors Meeting and Annual Dinner, La Salle Hotel

7:00 p.m.—14th Annual RSES Banquet & Floor Show, Terrace Casino, Hotel Morrison

### Monday, November 5

9:00 a.m. to  
10:00 p.m.—Exposition Registration, Navy Pier

8:00 a.m.—RSES Registration, Morrison Hotel

9:00 a.m.—Exposition Kickoff Breakfast, Grand Ballroom, Hotel Sherman (By Invitation)

9:00 a.m. to

12:00 noon—RSES Educational Program, Morrison Hotel

9:00 a.m.—REWA Registration, Hotel Sheraton

10:00 a.m.—REWA 16th Annual Meeting, Grand Ballroom, Hotel Sheraton

10:00 a.m.—NCRSA 5th Annual Convention, Century Room, LaSalle Hotel

2:00 p.m.—NCRSA 5th Annual Convention, Century Room, LaSalle Hotel

2:00 p.m.—Opening of 7th All-Industry Refrigeration and Air Conditioning Exposition, Navy Pier—Open to entire industry to 10 p.m.

2:30 p.m.—REWA 16th Annual Meeting, Grand Ballroom, Hotel Sheraton

7:00 p.m.—NCRSA 5th Annual Banquet, Grand Ballroom, LaSalle Hotel

### Tuesday, November 6

8:00 a.m.—RSES Registration, Hotel Morrison

9:00 a.m.—Exposition Registration, Navy Pier

9:00 a.m.—RSES Educational Program & Final Business Session, Morrison Hotel

10:00 a.m.—NCRSA General Meeting, Century Room, LaSalle Hotel

10:00 a.m.—7th All-Industry Exposition—Open to entire industry to 6:00 p.m.

7:30 p.m.—REWA Cocktail Party, Boulevard Room, Sheraton Hotel

REWA Banquet, Grand Ballroom, Sheraton Hotel

### Wednesday, November 7

9:00 a.m.—Exposition Registration, Navy Pier

12:00 noon—7th All-Industry Exposition—Open to entire industry to 10:00 p.m.

6:00 p.m.—REMA Cocktail Party Lake Shore Club of Chicago (By Invitation)

### Thursday, November 8

9:00 a.m.—Exposition Registration, Navy Pier

10:00 a.m.—7th All-Industry Exposition, Open to entire industry to 4:00 p.m.

## THE "TALK" OF THE SHOW

WE CAN SAY without exaggeration that Booth A-116, COMMERCIAL REFRIGERATION's space, will be the "talk" of the 7th All-Industry Show.

Through a special arrangement with Motorola, Inc., and with the permission of the Show management, COMMERCIAL REFRIGERATION will operate a unique Walkie-Talkie service to carry messages quickly to exhibitors and visitors.

Messages received by telephone or in person at the COMMERCIAL REFRIGERATION booth will be relayed to a corps of walkie-talkie operators (who, by the way, will be attractive young ladies) stationed at

various points throughout the Show's exhibit area. The operator nearest the person being "paged" will locate him promptly, and give him the message.

It took some doing to get this "message service" set up. Federal Communications Commission approval of the project had to be obtained, and a special wavelength assigned, even though the system will operate only within the Show exhibit area at the Navy Pier.

It's a long, long way from one end of the Pier to the other—and we hope our "message service" will help save both time and leg-work for Show exhibitors and visitors. Make use of it—you're welcome.

*Learn about the*

# **STABILITY**

**of**

# **SUN ISO**

# **Refrigeration Oils**

*at Booth 202*

*Chicago Refrigeration Show*

**SUN OIL COMPANY**

PHILADELPHIA 3, PA. • SUN OIL COMPANY, LTD., TORONTO AND MONTREAL



# What's New for '52

*What new products will be available to you in 1952?*

*What is the merchandising outlook for these products?*

**I**N AN ATTEMPT to throw some light on these two questions which are uppermost in the mind of every refrigeration and air conditioning distributor, dealer, contractor, and serviceman in these uncertain times, we are presenting in this section a round-up of new products which will be displayed at the 7th All-Industry Show and

which are advertised in the pages of this "Tell-All" issue. We also are presenting each manufacturer's "view for '52", in the hope of helping our readers project and direct their own activities by giving them the benefit of some high-powered crystal gazing into the industry's future.

—The Editors

## LOW TEMPERATURE CABINETS

C. V. Hill & Co., Inc.  
Booth 537



**FEATURED PRODUCT**—Model 82-XIC open ice cream cabinet. Extra coiling and larger compressor provide lower temperatures (-10 to -20 F) required for open sales of ice cream. Five-ply sealed glass on front retards condensation. Adjustable partitions permit display of any size package. Forced air refrigeration system provides lowest temperature at top of display. Automatic hot gas defrosting prevents the accumulation of ice in the fixture and frost on packages.



### OUR VIEW FOR '52—

"The potential for refrigerated fixture sales in 1952 depends so much upon Government regulations that it is difficult to forecast. Shortages of scarce materials have forced curtailment of new building construction. Since almost half of the equipment sold in the past year has been installed in new market buildings, this construction curtailment is bound to reduce the market potential by that amount. On the other hand, Government restrictions on manufacturers will reduce by a considerable amount their use of scarce materials. Thus the reduction in the market potential should balance out with production so that refrigerated fixtures are likely to be available for the reduced requirements."—JOHN F. STAPLES, general sales manager.

**KELVINATOR DIV.**  
Booths 401, 404, 407, 410



**FEATURED PRODUCT**—A 12-cu. ft. low temperature, self-service merchandiser especially designed for "spot" display of ice cream or frozen foods. Thermopane glass front and illuminated superstructure are designed for open-top operation. Small capacity makes it ideal for highlighting a single item or group of items strategically located away from mass displays of similar products, thus stimulating impulse buying of the featured items. Other models range down to 6 cu. ft. (Other products include ice cream cabinets, beverage coolers, water coolers, sealed and open-type condensing units.



**OUR VIEW FOR '52**—  
"In today's market, frozen foods and ice cream, more than any other commodities, must be aggressively merchandised. Accordingly, we have expanded our line of low temperature

display cabinets to include open-top, glass-front models. In our opinion, the potential market for frozen food merchandising cabinets is excellent, and will continue to be for years to come."

—H. C. PATTERSON, commercial sales manager.

**BAILEY & PERKINS CO.**  
Booth 601

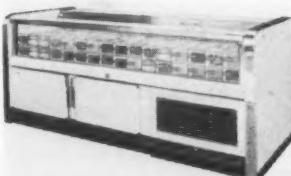


**FEATURED PRODUCT**—Model GF 1051 frozen food display cabinet designed as companion model to GI 1151 ice cream cabinet. Large louvered inspection panel is easily removed. Tecumseh hermetic unit can be removed from front, with plenty of working space. Extra deep rubber breaker at top of food compartment. Reflecting mirror plus full-view quadruple Thermopane front. Almost unbreakable "Tuflex" glass end wings. Furnished with polished rub-rail in front to prevent shopping carts from marring cabinet.



**OUR VIEW FOR '52**—  
"In these trying times it is somewhat difficult to balance the "Market Potential" against the "Availability of Material." In fact, it would appear that there is more material available than can be used legally. Considering things strictly from the standpoint of what government regulations will let us do, we are convinced that the market demand during 1952 will far exceed our ability to produce frozen food and ice cream display cabinets."—CLARE L. PERKINS.

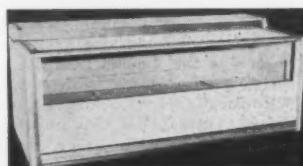
**BALLY CASE & COOLER CO.**  
Booths 451, 455, 458, 462



**FEATURED PRODUCT**—Automatic self-defrosting open style frozen food case. Open display is extremely deep, measuring 25% inches, making possible effective mass display. Large storage compartment in base makes available the bulk storage capacity required for reserve stock. Automatic defrosting eliminates problem of scraping ice off coils and the accompanying "warm" periods in the case when foods normally would get soft. Defrosts automatically and quickly at various periods.

**OUR VIEW FOR '52**—  
"We expect a demand for cases in 1952 that will exceed production capacity. Building restrictions will reduce the number of super market openings. Existing markets will continue to remodel and there should be a sustained demand for all types of open cases. CMP allocations of copper, steel, and aluminum for the first quarter of 1952 are substantially reduced. This must result in reduced case production that will probably be less than is required to fill the demand."—GEO. M. PRINCE.

**THE WARREN CO., INC.**  
Booth 336



**FEATURED PRODUCT**—A new 8-foot frozen food display case, Model LO-8. Even fruits and juices with high sugar contents are kept firm and in finest quality by the sub-zero temperatures of this unit. Its capacity of 612 packages is exceptional, and practically this entire display is visible through the extra-wide four-glass Thermopane display front.



**OUR VIEW FOR '52**—  
"Continued high employment levels should increase the demand for commercial refrigeration, particularly with independent operators who are able to quickly respond to upward trends. We feel that NPA will continue to recognize the essentiality of commercial refrigeration to our national welfare, and this coupled with the ingenuity of the manufacturers in using their allocations to the best advantage, will enable them to fairly well meet the increased demand."—ROGER D. JACOBS, secretary and sales manager.

**UNITED REFRIGERATOR CO.**  
Booths 343, 345



FEATURED PRODUCT: New 30-cubic foot freezer built with coiled shelves and tank liner.



**OUR VIEW FOR '52—**"Warnings of shortages and scares will not sell equipment in 1952. Quality and service plus patient, intelligent salesmanship will move an abundance of merchandise this coming year."

Contrary to present forecasts, we at United believe that there will be spotty, short-lived shortages. Prices will not go down, but will be firm to higher." —LEONARD SHAPIRO, president.

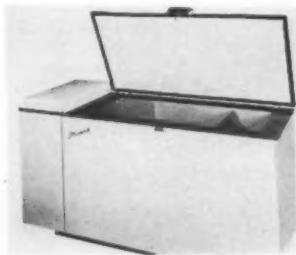
**AUG. G. BARKOW MFG. CO.**  
Booth 473



FEATURED PRODUCT—Model F-18 food freezer. All steel construction, 18-cu. ft. capacity. New capillary system, drier, and heat exchanger. This new model also introduces transition from name of "Benbar" to "Barkow Vertical Cold Shelf Freezer," and the new monogram indicates this transition to the new trade name.

**OUR VIEW FOR '52—**"The market potential for freezers generally in 1952 will exceed that of 1951. However, material will not be available to supply and satisfy all of the requirements. With the present CMP regulation and the copper shortage, we will have all we can do to obtain enough material to produce approximately 50% of our capacity." —GORDON J. NEILSON.

**EMIL STEINHORST & SON, INC.**  
Booth 240



FEATURED PRODUCT—New 16-cu. ft. "Challenger" Freezer introduced to the trade for the first time. This streamlined model has "Dutch" freezer plates that form the refrigerated partitions. It has an automatic interior light recessed into the counterbalanced lid. Baskets are included. A warning device also is standard equipment.

**OUR VIEW FOR '52—**"Freezers are proving to be household necessities. There will be a healthy freezer market for some time. It appears, however, that controls and restrictions will keep manufacturing prospects uncertain and unpredictable. The milk cooler branch of the refrigeration industry is due for a change. New methods of milk cooling are being introduced, are undergoing experimentation, and are being promoted. Its immediate future will prove interesting." —HENRY STEINHORST, president.

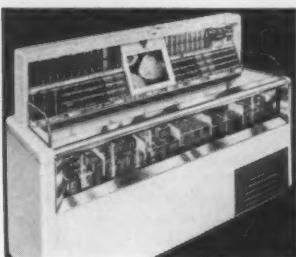
**R. H. BISHOP CO.**  
Booth 329



FEATURED PRODUCT—Low temperature, wall type, single duty, wide open display cabinet. Self-contained case comes complete with "Plasticolor" picture, lighted signs, package floodlighting, and mirror. Lower front machine compartment door easily removable for complete access to all mechanical component parts. Five-year compressor warranty and five-year food insurance. 8 sq. ft. open display area will hold 348 ice cream pints or 356 frozen food packages in five compartments. Hermetically sealed Servel Freon-12 condensing unit of  $\frac{1}{2}$ -hp capacity.

**OUR VIEW FOR '52—**"We feel that business conditions will be better during 1952 than they were in 1951, and that we will be working on a successful and profitable basis. However, we do not have anything definite on which to base this opinion, and there are so many unknown factors in business today, such as the market potential and the supply of raw materials, all connected with the war effort, that it would be almost impossible for anyone to discuss this situation on a definite basis." —R. H. BISHOP, president.

**WEBER SHOWCASE & FIXTURE**  
Booth 533



**FEATURED PRODUCT**—A new ice cream and frozen food display case, the "Display-Rite" Model RCD-2059, designed with a "selling superstructure" for related items that is said to add one-third more selling space in the same floor space. Locating the related items atop the case is intended to spur impulse buying both of the ice cream itself and the toppings, nuts, cookies, cones and similar items displayed on the two upper shelves and the superstructure top.



**OUR VIEW FOR '52**—

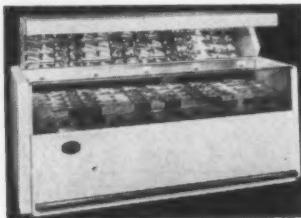
"On the basis of present availability of raw materials it would be our view that in 1952 equipment would be more difficult to obtain and the price picture will be firmed up considerably, although we expect to take care of all of our customers."—J. L. KAUFHOLD, general sales manager.

**ACE CABINET CO.**  
Booths 313, 315, 317

**FEATURED PRODUCT**—A complete line of low temperature cabinets will be displayed by Ace Cabinet in its three-booth space at the Show. The

line will include cabinets styled and fitted to provide the maximum in store merchandising possibilities for frozen food products.

**SHERER-GILLETT CO.**  
Booth 471



**FEATURED PRODUCT**—Model 2008CS, available with or without mirrored superstructure. Any number may be joined for a continuous display without any divider being used along the display level. Fully automatic defrosting. Large capacity. Four-glass "Twindow" front with plate glass baffle and package guard. Forced convection cooling.  
(Other products include glass door reach-in, packaged meat and produce cases.)

**OUR VIEW FOR '52**—

"Our industry should do reasonably well, notwithstanding controls, for the valid and logical reason we're so closely allied with foods. It's evident, under our food distribution system, that increased food production would be wasted if constant supplies of refrigeration equipment aren't available to preserve and place it in consumers' hands."—L. O. BOWER, vice president.



## MEAT, PRODUCE, DAIRY CASES

**HUSSMANN REFRIGERATION**  
Booth 213



**OUR VIEW FOR '52**—  
"Some materials will become scarce in 1952. We doubt that it will be possible to produce as much refrigerator equipment for food stores in this coming year as during 1951. It is our impression that the demand for equipment for remodeling purposes will increase in 1952, but this will be

offset by a decline in number of new food stores to be completed because of building restrictions. It is our opinion that while food store equipment may not be too plentiful in 1952 there will be no particular hardship imposed on users of the equipment and it is more than probable that it may be necessary to continue to do a first-class selling job to move that which will be produced."—W. J. STELPFLUG, vice president.

**PINNACLE EQUIPMENT CORP.**  
Booth 482



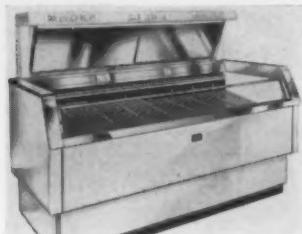
**FEATURED PRODUCT**—New three-shelf self-service dairy case, available with or without superstructure. Constructed throughout of porcelain, stainless steel, and aluminum, with heavy-duty wooden frame. Cases can be erected in line to form continuous display.  
(Other products include complete line of self-service cases for meat, dairy products, and frozen foods.)



**OUR VIEW FOR '52**—

"With the addition of self service equipment to our line, we will be able to meet the demands of our many customers, from the small corner grocer to the large supermarket. We will be able to supply our dealers with all the units they require, unless Government directives prohibit us from doing so."—HAREL H. BECKER, president.

**KOCH REFRIGERATORS**  
Booth 512



**FEATURED PRODUCT**—Series 800 continuous self-service cases for packaged meat. Available in 7 and 10-foot lengths. "Salesmaker" superstructure contains fluorescent lights and sliding mirrors. Translucent display signs are furnished. Sliding panels can be of clear glass if desired for see-through vision from service area. Shelves are fully adjustable front and back. Fully insulated welded steel construction. Permanently sealed fan motor. Heater wires minimize condensation on front glass.



**OUR VIEW FOR '52—**

"We are no prophets. We have no inside information on the possibilities of further materials curtailments in 1952. However, our experience since 1883 tells us that within whatever framework of limitations exists, there will be a market for our equipment in 1952 if we can continue to build refrigerators that will sell foods, preserve foods, are easily maintained, are built to last, and are economical to operate."

—MILLARD MAYER, president.

**PENGUIN PRODUCTS**  
Booth 605



**FEATURED PRODUCT** — A new dairy display cabinet of 10 cu. ft. size, with capacity of 112 quarts of milk on bottom shelf, plus storage room for eggs, butter, cream, etc. on the other two shelves. PDD-5110 cabinet is of welded steel construction with baked white enamel finish and stainless steel trim. Finned coils are set on defrosting cycle and are installed in liner of cabinet. Full vision plate glass end shields, fluorescent lighting,  $\frac{1}{2}$  hp F-22 condensing unit.

**OUR VIEW FOR '52—**"Believing conditions are what you make them, we have designated equipment using the least possible amount of critical material without sacrificing quality. As long as the industry is allowed to produce, we will be delivering cabinets. Our sales program will endeavor to bring about mutual cooperation between the frozen food distributor and the refrigeration equipment distributor to merchandise low temperature equipment for the benefit of both."—C. D. YOUNG, general manager.

**TYLER FIXTURE CORP.**  
Booth 105

**FEATURED PRODUCT**—Model ST5 refrigerated display table, and Model TF12ALT top display frozen food case, both new in design. Display table is island fixture serviceable from all four sides.

(Other products include self-service meat case, three-shelf dairy case, produce case, reach-through case, reach-in, 6-foot beverage cooler, and home freezer.)

**OUR VIEW FOR '52—**"In the years preceding the war, it was relatively simple to project a sales pattern, but once again we're face to face with numerous problems, including curtailment of raw material and government restrictions on new building, which will definitely affect the commercial industry in 1952. Although not too pessimistic, we are still thankful for being in a very important industry and one so vital to the welfare of any nation in a peace or defense program."—ROBERT L. TYLER, president.

**JORDON REFRIGERATOR CO.**  
Booth 237



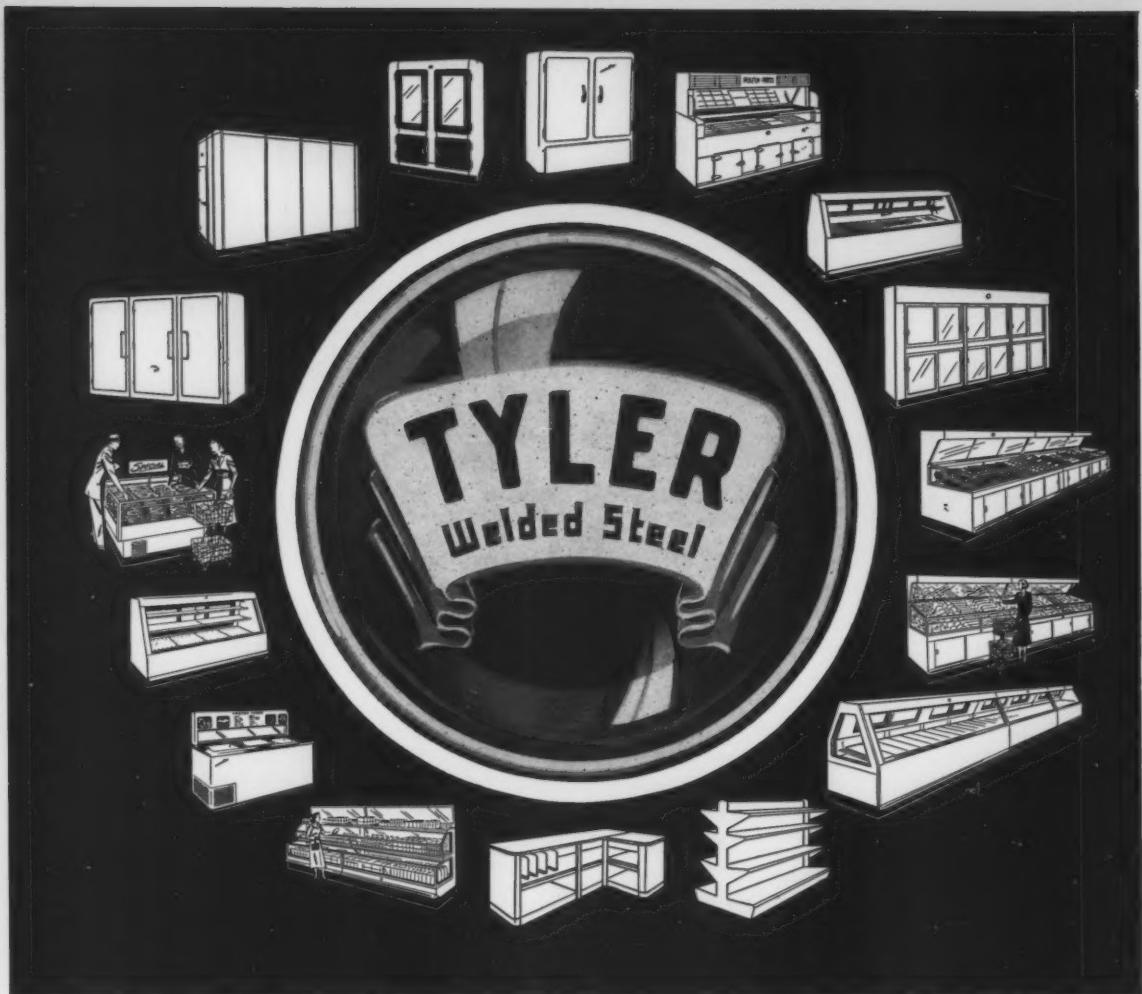
**FEATURED PRODUCT**—Model D-54M self-service dairy product merchandiser especially designed for smaller food stores.  $\frac{1}{4}$ -hp hermetic condensing unit mounted on side-out tracks. Full length coil and air circulating fan provides steady flow of cool air over entire cabinet to maintain proper humidity. Will hold 100 quart containers in main section, 150 cartons of cheeses, eggs, etc. on auxiliary refrigerated shelves. Merchandising superstructure holds related non-refrigerated items.

(Other products include frozen food cabinets, reach-in refrigerators, upright freezers, and wall display cases.)



**OUR VIEW FOR '52—**

"While our company has been awarded several major defense contracts, in the past two years we have expanded our manufacturing facilities to such a point that our civilian production should not be affected. We believe that the bulk of refrigeration sales during the next few years will be in specialty items and we have geared our planning to make such equipment available to the refrigeration dealers."—HARRY FOGEL, vice president in charge of sales.



## *The complete line of display and storage refrigerators!*

TYLER-MADE refrigerators of various types are now available for an extremely wide variety of applications in many fields. Over 400 items in the complete Tyler line meet the perishable-display-and-storage requirements of any food store . . . super-market . . . delicatessen . . . restaurant . . . hotel . . . hospital . . . institution . . . drug-store . . . bakery . . . florist shop . . . bar . . . tavern . . . motel . . . school, etc.

Tyler representatives are cashing in on a constantly widening list of prospects for sales. And their customers know that IF IT'S TYLER-MADE IT'S RIGHT—in price, design, value and utility! Tyler Fixture Corporation, Niles, Michigan.

### FOUR GREAT PLANTS



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COBLESKILL, NEW YORK



SMYRNA, DELAWARE



WAXAHACHIE, TEXAS

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and AIR CONDITIONING • NOVEMBER, 1951

**FOGEL REFRIGERATOR CO.**  
Booths 549, 553



**FEATURED PRODUCT**—"Vegmart" self-service produce merchandiser. Provides fruit display, refrigerated produce display, and potato and onion bin display, all in one case. Refrigerated produce display on middle deck has built-in moisture refreshener. Adjustable dividers allow large variety of items. Top deck is mirror backed to double display effect of non-refrigerated produce. Dry storage bins slanted to put merchandise within easy reach. Display decks are fluorescent lighted. Removable ends for continuous line-up.



**OUR VIEW FOR '52—**

"The national guessing contest is apparently over. It is very evident now that defense production will soon put the squeeze on civilian supplies, especially steel, copper, and aluminum. The buyer's market in commercial refrigeration will therefore gradually revert to a seller's market by next spring. Dealers then will be able to get equipment for normal requirements, but the excess stock now in warehouses all over the country will then disappear."—E. A. TERHUNE, vice president, sales.

**EVANS MFG. CORP.**  
Booths 441, 445

**FEATURED PRODUCT**—Five 1952 models of refrigerated display cases will be shown by Evans, led by the Model ODV open self-service vegetable case, which has new-type sliding storage doors, a large display and storage area, a crate roller in the storage compartment, and an automatic defrosting device. Other new

equipment will include Model OTD open self-service triple-tier endless display case; Model DSS dairy and beverage wall case; Model HR full-vision display case; and Model SSM-4 open self-contained display case with Thermopane glass front, full-length mirror and automatic defrosting feature.

**LINGLE REFRIGERATOR CO.**  
Booth 547

**FEATURED PRODUCT**—Double deck self service self-contained case, produced in lengths of 4, 6 and 8 feet. Exterior is in white porcelain, fluorescent flood lighting for each deck, eliminating dark corners. Both decks have large display area, and are readily accessible. Wire chrome shelving is used. The case is guaranteed to maintain 40 F temperature in both decks under normal operating conditions.

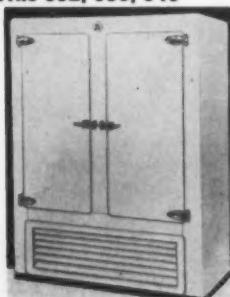
**OUR VIEW FOR '52—**

"It is apparent at the present time that it will be necessary for the smaller type of manufacturers like ourselves to work on a hand-to-mouth basis, as far as materials are concerned for months to come. We anticipate the market for commercial equipment to improve during the coming year; certainly there is still plenty of room for the expansion and improvement."—DALE NEAL, sales representative.



## REACH-INS, SPECIALTY EQUIPMENT

**LA CROSSE COOLER CO.**  
Booths 532, 536, 540



**FEATURED PRODUCT**—New line of reach-in refrigerators to be available shortly. Self-contained models in 25 and 35-cu. ft. capacities; remote units in 33 and 45-cu. ft. sizes. Remote models will have four doors; self-contained units will have two. Cooling will be effected by blower coil. Interiors and exteriors of baked enamel. Ice cube makers will be available on request.



**OUR VIEW OF '52—**

"We face 1952 with optimism. Recently we completed facilities to make possible doubling our production potential and concurrently enlarged our experimental and development department with a view toward creating new products. Reach-in refrigerators, plus several other new products soon to be marketed, now offer a broader line to our dealer organization which has been growing steadily."—R. S. DENZER, president and general manager.

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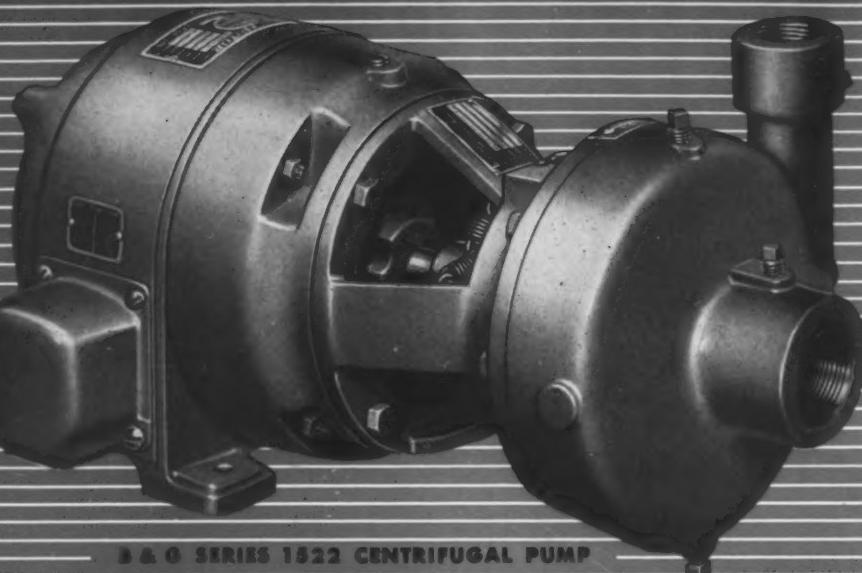


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**B&G 1522 PUMP**



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B & G precision-built Refrigeration Equipment offers new and better design—rugged construction— painstaking workmanship—all combined to provide top performance with longer service life. The many plus features added to the basic soundness of B & G design are a warranty of that priceless asset—customer satisfaction!

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## MADE TO ORDER FOR REFRIGERATION AND AIR CONDITIONING INSTALLATIONS

Measure the B&G Series 1522 Pump by any standards you choose . . . you'll say you've never before seen so many warranties of performance in a single unit.

The B&G Leak-proof Seal alone establishes this pump as the "buy" for your cooling tower or evaporative condenser installations. The Seal is self-lubricating and eliminates the usual leakage through the packing gland—assures long, trouble-free service.

It's a quiet pump. Long bronze sleeve bearings hold the shaft in alignment and the spring-type flexible coupling helps keep noise at a minimum. The impeller is hydraulically balanced . . . highly efficient.

Bearing bracket sub-assembly, including shaft and sleeve bearings, is interchangeable in all B&G 1522 Pumps. Easily serviced—the pump separates into three parts.

The B&G 1522 is available in all-iron, bronze-fitted, all-bronze or stainless steel units.

Send for Catalog CY-350



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**REFRIGERATION**  
**EQUIPMENT**

BELL & GOSSETT COMPANY

Dept. CG-45 Morton Grove, Illinois

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NOVEMBER, 1951 • COMMERCIAL REFRIGERATION

## FEDERAL REFRIGERATOR

Booth 103



**FEATURED PRODUCT**—An entirely new super market storage reach-in freezer of 90 cubic feet capacity. This model features self-defrosting and is an entirely new unit in the expanding Federal refrigerator line.



### OUR VIEW FOR '52—

"The completeness of our line and effectiveness of our national advertising program have been responsible for the increased business of 30% over our 1950 volume. With more

dealer coverage, we expect to continue our present growth for the year 1952."

—JOHN ROMADKA, president.

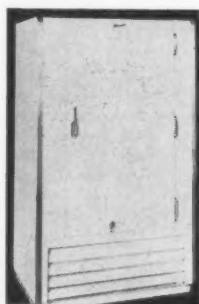
## S. A. HIRSH MFG. CO.

**FEATURED PRODUCT**—Complete line of shelving and gondolas for the food store trade. All shelving fully adjustable. "Pre-bilt" system makes possible both wall and gondola units that the merchant himself can assemble.

**OUR VIEW FOR '52**—"We do not foresee any difficulty in supplying our customers during the coming year unless world conditions bring about a complete change in the procurement of materials."—DAVE SHULMAN.

## HOWARD REFRIGERATOR CO.

Booth A-476



**FEATURED PRODUCT**—Dough retarder freezers for pre-mixed doughs to be retarded for prompt use. The two new models are the DR-36 and the DR-40. They are powered by  $\frac{1}{3}$  and  $\frac{1}{2}$  hp hermetic units, respectively. The doors on both models are double sealed, while in the DR-40 there is a double split inner door. There is  $16\frac{1}{2}$  cu. ft. capacity in the DR-36 and 19 cu. ft. capacity in the

DR-40. Both models will accommodate standard 18 x 26-inch dough pans. Maximum capacities with minimum space. Self-contained and ready for plug-in-use.

(Other products include dry beverage cooler, upright freezer, and self-service cases for frozen foods and dairy products.)

## DISPLAY CASE GLASS

## LIBBY-OWENS-FORD GLASS CO.

Booth 323

**FEATURED PRODUCT**—"Thermopane" insulating glass for use in all types of commercial refrigeration equipment and installations where high visibility must be combined with insulating qualities. Construction of multi-glass panes with air spaces between makes this glass resistant to fogging.

(Other products include transparent mirrors and "Vitrolite".)

### OUR VIEW FOR '52—

"Glass, although an important item in the national defense picture, will not be in as short supply during 1952 as other essential materials in the manufacture of commercial refrigeration equipment. While supplying many defense items, we will continue production of polished glass and Thermopane for commercial refrigeration and will soon introduce a new line of super-fine fibre glass for use as an insulating material."—G. P. MacNICHOL, JR., vice president in charge of sales.



## PACKAGED COMMERCIAL EQUIPMENT

**KOLD-HOLD MFG. CO.**  
Booths 127, 129



**FEATURED PRODUCT**—"Package" self-contained refrigeration system for truck installation. Complete assembly of all units necessary to refrigerate a properly insulated truck body to 45-50 F for a day's run. Consists of two "hold-over" plates and an electric-motor-driven 1-hp compressor enclosed in an insulated compartment. Plugged into any outlet, unit freezes eutectic solution in plates to provide refrigeration for next day's run. Adjustable to fit almost any truck. Only installation required is cutting of air intake and exhaust holes in truck floor.



**OUR VIEW FOR '52**—  
"Our 1952 projected sales figures estimate our refrigeration sales at \$2 or \$3 million, providing CMP does not cut our present allocation. Our war orders total something over \$2 million at the present time."—CAROL K. DAVIS, sales manager, refrigeration div.

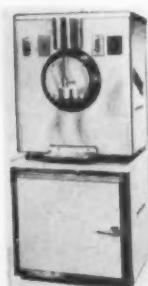
**CARRIER CORP.**



**FEATURED PRODUCT** — A new 1952 model automatic ice cube maker will be introduced. Capacity of the machine is rated at up to 450 lbs. a day, or approximately 8500 cubes. A device actuated when cubes are frozen lets cubes slide into storage bin, and an automatic control stops freezing when bin is full, and starts it again when ice is removed. Ice cube crusher can be supplied as optional equipment so that either cubes or crushed ice can be furnished. Grade of crushed ice can be controlled. All water-handling parts of stainless steel.

**OUR VIEW FOR '52**—Carrier's field organization expects to devote considerable time to training and promotional work with dealers on ice cuber sales during the coming year. Carrier has provided financing plans both at the wholesale and the retail level. The retail plan is very broad, covering both conditional sales contracts and meter plan sales. Some production restrictions may be necessary due to material shortages and limitations."—JOHN MANION, dealer sales manager, automatic ice makers.

**SWEDEN FREEZER MFG. CO.**  
Booth A-466



**FEATURED PRODUCT** — Model 1-190 continuous freezer. Compact table model designed for mounting on table, stand, or reserve supply mix compartment. Self-feeding mechanism automatically maintains full quantity of product in cylinder, with constant air intake assuring high average overrun control. Simple to operate. Foot switch controls serving spout, dasher, and mix intake valve. Refrigerated mix space of 4-gallon capacity sets over the cylinder.

**OUR VIEW FOR '52**—  
"Shrinking profits of food handling establishments make them ideal prospects for cost-cutting equipment like Sweden Freezers. Although we expect our equipment to be less available than the demand calls for, dairy product equipment such as ours enjoys a preferred position in essential material cut-backs, thus easing the pinch of shortages. We are certainly preparing for a big year ahead."—HARVEY F. SWENSON, president.

# DETROIT'S PLAN-

## SELLS YOUR CUSTOMERS!

### COVERING BOTH THE INDEPENDENT and CHAIN STORE FIELDS

Now you can cash in on profitable new chain store business! Powerful DETROIT advertising, already proven successful to refrigeration servicemen by increasing business in the independent food store field, is now selling the vital need for proper refrigeration maintenance to chain drug, grocery and variety stores the country over. Month after month DETROIT advertising will be working for you, selling your services to this rich, refrigeration conscious market!

Visit us at the 7th  
ALL INDUSTRY EXPOSITION

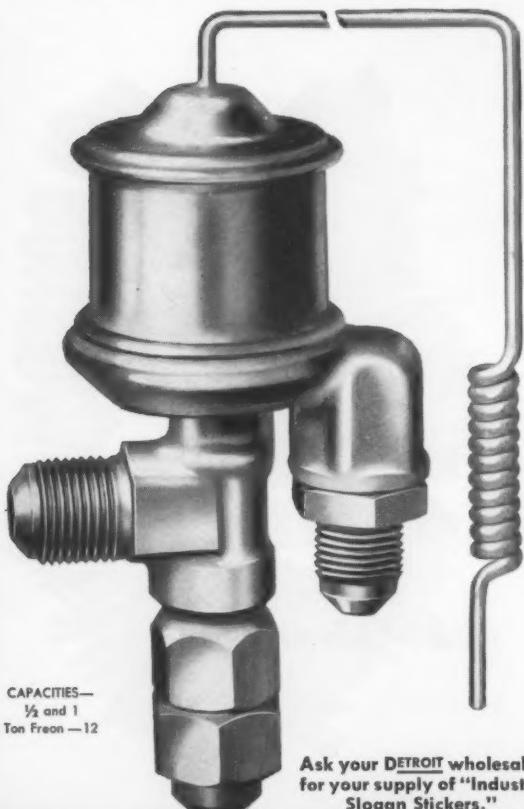
Navy Pier, Chicago, Nov. 5-8th  
Booths 415, 419, 423, 427



## DETROIT PRODUCTS KEEP THEM SOLD!

INSTALL DETROIT'S NO. 573  
THERMOSTATIC EXPANSION VALVE

DETROIT'S No. 573 Thermostatic Expansion Valve is a sure bet to put you on the road to sound and solid customer relations—and keep you there! That's because the 573 is built to assure accurate refrigerant control over long years of economical, trouble-free service. Examine it and you'll see why. Its double diaphragm construction, gas charged element, self-aligning needle and hermetically sealed joints provide immediate proof of peak on-the-job performance. And when you add to this its rugged forged brass body, stainless steel needle and seat, flexible coiled feeler bulb and monel inlet strainer you know that this is a remarkable valve from every standpoint. See your DETROIT wholesaler today or write for Bulletin No. 226.



CAPACITIES—  
 $\frac{1}{2}$  and 1  
Ton Freon — 12

Ask your DETROIT wholesaler  
for your supply of "Industry  
Slogan Stickers."



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LUBRICATOR COMPANY

5900 TRUMBULL AVE., DETROIT 8, MICHIGAN

Division of AMERICAN RADIATOR & Standard Sanitary CORPORATION

RAILWAY & ENGINEERING SPECIALTIES, LTD.: CANADIAN Representatives in Montreal, Toronto, Winnipeg,

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DETROIT HEATING AND REFRIGERATION CONTROLS • ENGINE SAFETY CONTROLS • FLOAT VALVES AND OIL BURNER EQUIPMENT • DETROIT EXPANSION VALVES AND REFRIGERATION ACCESSORIES • STATIONARY AND LOCOMOTIVE LUBRICATORS

Serving Home Office Industries AMERICAN-STANDARD • AMERICAN BLOWER • CHURCH SEATE • DETROIT LUBRICATOR • KIWANIS BOILERS • BOSS HEATER • TONAWANDA IRON

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and AIR CONDITIONING • NOVEMBER, 1951

*Here it is...*



**THERM-O-CYCLE**



### **The ultimate in hot gas defrosting**

Therm-o-cycle is a simple refrigeration system using room air passed over a re-evaporator coil to furnish the heat required for defrosting. Dependable, automatic and trouble-free Therm-o-cycle has been proven in thousands of fixture installations the world over. Now, this system is available for larger commercial installations.



Write for Bulletin No. 525 which gives complete specifications and instructions.

**Buy the Best — and the Best is Bush**

**Bush Manufacturing Co.**

**WEST HARTFORD 10, CONNECTICUT**

Circle No. 42 on Reader Service Card for more information

**NOVEMBER, 1951 • COMMERCIAL REFRIGERATION**

**YATES-AMERICAN**  
Booth 552



**FEATURED PRODUCT**—"Ice Boy" automatic ice cube machine. Trouble free and inexpensive to operate. Aside from the sealed-in compressor unit this machine has but one moving part, a revolving paddle that circulates the water and removes the finished "tip" to the storage bin. When storage is

at capacity, unit automatically stops; when the supply of tips is partially diminished, the freezing process automatically starts again. The ice tips can be frozen to desired sizes by simple adjustment. Compact size of unit permits easy installation under any standard bar or counter.

**LOUDON MFG. & SALES**  
Booth 486



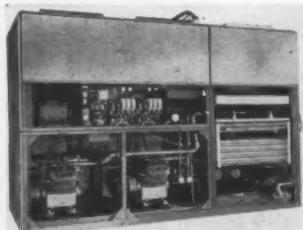
**FEATURED PRODUCT**—New model automatic ice cuber. Equipped with a time-clock which controls mechanism so that 70 rounds, solid ice cubes are released every 30 minutes. Cubes produced by new models are larger than those produced by earlier models. Cube storage bin has been moved to the center of the machine for easier accessibility. All water and sewer connections have been moved

to side for easier installation. New water valve reduces the amount of water necessary for the operation. Easier to service because of pull-out type compressor units. Relay fuse switch to the solenoid makes it impossible to burn out the valve. Available in two models with storage capacity of 180 pounds and 125 pounds.

## PACKAGED AIR CONDITIONERS, DEHUMIDIFIERS

**UNITED STATES AIR CONDITIONING CORP.**

Booths 316, 318



**FEATURED PRODUCT**—Dual circuit refrigerated "Kooler-aire" unit, a complete packaged air conditioning plant, including evaporative condenser, plus two complete refrigeration circuits. Provides great economy where loads vary and where capacity control is required. Unique internal wiring provides for alternating lead compressor to insure even wear. Time-delay relay prevents both compressors from starting simultaneously. Wired for use with two-stage thermostat for normal operation.

**OUR VIEW FOR '52**—  
"The market potential for package refrigeration equipment during 1952 should be excellent, due to increased acceptance of air conditioning as a prime business requirement, new applications not previously exploited, and increased public demand for comfort cooling." — DAVID F. FEINBERG, vice president.



**REMINGTON AIR CONDITIONING DIV.**

Booths 449, 453

**FEATURED PRODUCT**—New 1/3-hp window model room air conditioner. The Model 4 "Roomette" provides all the benefits of true air conditioning at a minimum cost. Easily installed, just plug it in. No drain or water connections required. Harmonious design blends with all surroundings. Provides ventilation, filtering, circulation, noise elimination, cooling, dehumidification.

**OUR VIEW FOR '52**—  
"Despite Regulation W, a cold May, June and July, and constipated major appliance sales generally, latest statistics indicate 1951 room air conditioner sales to dealers, while spotty, exceeded the record-breaking 193,807 units shipped in 1950. CMP will not permit building the 300,000 units which should be sold next year." — HERBERT L. LAUBE, president.



**TYPHOON AIR  
CONDITIONING CO., INC.**

**Booths 328, 330, 332**



**FEATURED PRODUCT** — Typhoon will introduce its packaged "Prop-R-Temp" heat pump, produced in sizes ranging from 2 to 20 tons capacity. Similar in appearance to the standard Typhoon packaged air conditioner; uses same cabinet, although in many cases plenum chamber is replaced by duct connections. Can be operated as free-standing unit. New heat pump employs electrically operated change-over valve controlled by selector switch which causes unit to heat or cool at will. Adaptable to home or commercial use.

(*Other products include multi-package systems of 40 and 60 tons capacity, water-chilling equipment, air conditioners up to 20 tons.*)



**OUR VIEW FOR '52** — "The new Typhoon Prop-R-Temp heat pump is the most revolutionary of our new products, but because of its novelty, we do not expect it to be a major production item immediately. The new water chiller system is particularly important to us in that it opens up many possibilities in the hotel, apartment house, and office field where standard packaged equipment often is not practical." — JAMES F. DAILEY, president.

**EBCO MFG. CO.**

**Booth 230**



**FEATURED PRODUCT** — A brand new electric dehumidifier, Model J-20 Oasis Air Drier. This model represents the latest engineering advances in dehumidifiers, is lighter in weight and a more compact form of the design pioneered and developed by Oasis in former models. It is 17½" long, 12¼" wide and 16¼" high and will eliminate excess atmospheric moisture in an area of 8,000 cubic feet. Unique moisture container is light, convenient to handle, and spill-proof. It is made of shatter-proof polyester reinforced with Fiberglas, in a color to match the cabinet. Operates on 115 volts, 50-60 cycles, a.c. and carries a 5-year factory warranty on the entire refrigeration circuit.

**OUR VIEW FOR '52** — "While all other activities revolve around the vast rearmament program of the U.S.A., intelligent and informed management will doubtless be able to produce good quantities of essential refrigeration appliances in 1952. One American element frequently overlooked is the enormous increase in productive capacity that has developed in the last decade, making possible simultaneous mass production of both 'guns and butter.' We confidently expect to continue our normal annual advancement." — A. R. BENUA, president.

**FEDDERS-QUIGAN CORP.**

**Booths 526, 529**



**FEATURED PRODUCT** — All electric, non-chemical, cabinet type dehumidifier. Compact and portable, will plug into any electrical outlet. Equipped with handy removable container for disposal of water it collects. Carries 5-year warranty. Capable of removing 2 to 3 gallons of water from atmosphere every 24 hours. Designed for any application where excessive moisture has a damaging effect upon products or equipment.

**OUR VIEW FOR '52** — "The market for almost all of Fedders products will definitely be there, but we will have to work a lot harder to achieve sales quotas. 1952 will see more people willing and able to buy. It is estimated that personal income will be over 210 billion dollars after taxes. The industry must reenergize its selling force, however, for the new era of salesmanship has already arrived. If industry as a whole can revert to the 'ditch digging' type of selling, then 1952 will be a good year." — A. J. DE FINO, general manager.



# ANNOUNCING! A REVOLUTIONARY NEW LIQUID INDICATOR



sliding sleeve keeps new  
Mueller Brass Co.  
QUIK-SIGHT liquid indicator  
clear and clean at all times

Have these STREAMLINE products on hand for every job where you want dependable performance.



DRIERS AND FILTERS



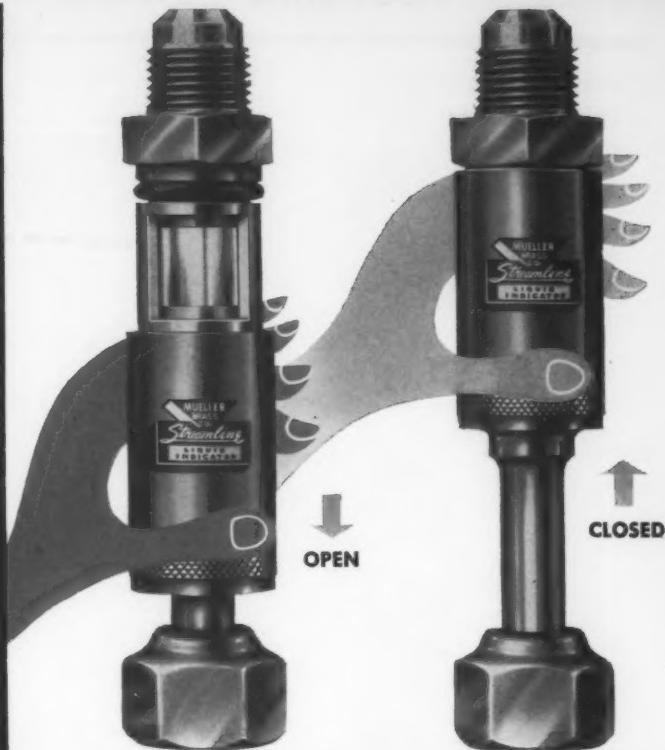
VALVES



FLARE FITTINGS



STREAMLINE refrigeration products are individual and multiple packaged for complete protection. Write for catalog R-151 describing complete line of STREAMLINE refrigeration products.



Just slide back the copper protective sleeve on the new Quik-Sight indicator and your refrigerant supply is instantly and clearly visible. Return the sleeve to closed position and the window is securely guarded against breakage. Two "O" rings in the assembly form a positive seal against dust, dirt and oil film when the sleeve is closed.

The revolutionary glass-to-metal soldering of Quik-Sight Indicators provides a thoroughly tight seal for any refrigerant, and eliminates need for gaskets and threaded joints that often work loose with vibration. Indicator design allows for thermal expansion through the whole assembly without strain.

Quik-Sight Liquid Indicators are easy to install. Wide wrench flats make it easy to get connections tight. The swivel connection on the flare end simplifies attachment to valves, driers or line because it eliminates all twisting strain on the indicator assembly during installation.

Quik-Sight Indicators are available in  $\frac{1}{4}$ " M. Fl. x  $\frac{1}{4}$ " Fem. Fl. and  $\frac{3}{8}$ " M. Fl. x  $\frac{3}{8}$ " Fem. Fl. There are MUELLER BRASS CO. Liquid Indicators to fit most installations. For complete information consult your refrigeration wholesaler or write to—

STREAMLINE  
PRODUCTS

MUELLER BRASS CO. PORT HURON 12, MICHIGAN

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and AIR CONDITIONING • NOVEMBER, 1951

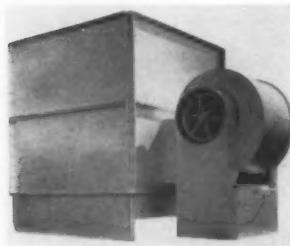
## COOLING TOWERS, CONDENSERS

KRAMER TRENTON CO.  
Booths 418, 422, 426, 430



FEATURED PRODUCT—"Unicon" remote self-contained air cooled condenser, which can make any size compressor completely air cooled at a considerable saving on first cost, installation and operation. Completely eliminates all water problems, such as corrosion, sliming, scale formation, freeze-ups, sewage problems, plumbing costs, etc. Can be supplied for outside mounting with stands and motor protection hoods. Where necessary, a discharge scoop can be furnished to eliminate wind problems.

BINKS MFG. CO.  
Booth 510



FEATURED PRODUCT—Model 2B blower type forced draft cooling tower, featuring dry fan type of blower. All galvanized construction. Extreme quietness of operation makes tower ideally suited for use on air conditioning installations. Cooling efficiency is extremely high. Tower is spray filled to eliminate necessity for using wood filling, which greatly reduces cost of maintenance and cleaning. Suitable for installation either indoors or outdoors. When used on indoor installations it is furnished with a tower exhaust adapter hood which facilitates installation of the exhaust duct. Rugged, heavy duty construction makes for long life.

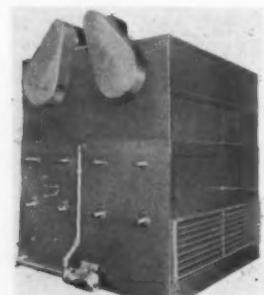
SNOWHILL MFG. CO.  
Booth 546

FEATURED PRODUCT — Water cooled evaporative condenser in sizes up to and including 2 tons. Small size condenser with low water consumption and high and controlled capacity. Easily adapted to confined spaces, and to truck, ship, train, or airplane installations. Requires minimum of maintenance, and no attention as to seasonal changes from freezing to non-freezing weather.



OUR VIEW FOR '52—"Under present unstable conditions, positive predictions of the future cannot be basically sound. However, I feel optimistic about the potential commercial refrigeration business for 1952."—S. CHARLES SEGAL.

BALTIMORE AIRCOIL CO.  
Booth A-318



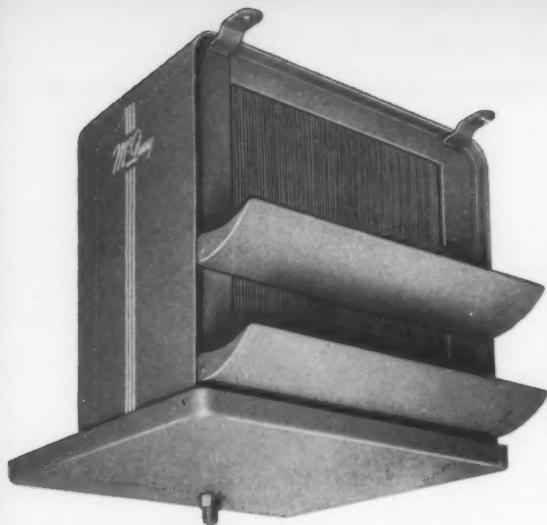
FEATURED PRODUCT—A new line of LT cooling towers in capacities of 105 to 225 TR in a single factory assembled unit. The line is suitable for either indoor or outdoor installation. Casings are of hot dipped galvanized sheets rigidly braced with hot dipped structurals. Fans are of heavy welded construction, zinc coated. Fans (4) are of forward curved, low velocity outlet type; fan motors are drip proof; separate motor drives each pair of fans.

(Other products include UL evaporative condensers, U evaporative condensers, PT cooling towers.)

OUR VIEW FOR '52—"We feel that the time for introduction of new equipment is now. Barring a drastic change brought about by actual war, we see difficulty in securing enough material to fill the orders of our dreams, but believe that there will be enough material available to keep the industry going."—EDWARD R. MAGNUS, secretary.



OUR VIEW FOR '52—"The materials outlook for 1952 is uncertain, to say the least, and according to informed sources shortages will be more pronounced as the year advances. However, I believe that by close checks on production methods and some substitutions of materials, we will be able to meet potential demands, which will expand with the Defense Program."—R. W. PENTECOST, general sales manager.



# Dependable Refrigeration!

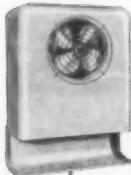
For Applications Above 35° F.

## *McQuay* Pacemaker Unit Coolers!



RADIAL UNIT COOLER

Designed for walk-ins, florist boxes, and other applications where maximum headroom is desired. Also for economical comfort cooling in small offices or shops. Available in seven sizes.



TWO-WAY UNIT COOLER

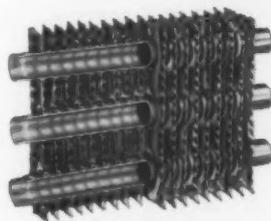
Compactness with efficiency for direct draw bars, back bars and reach-in refrigerators. Two sizes available.

PANEL  
CHILLATOR

For wall mounting in reach-in cabinets, beverage coolers, back bars, small walk-ins and similar applications. Six sizes to match your needs.



McQuay's smartly designed Pacemaker Unit Cooler is completely dependable. That's a fact proved by its wide use in walk-in coolers, back bars, novelty boxes, reach-in cabinets, etc., where performance must be assured. The easily installed Pacemaker comes in 12 models, two with refrigeration connections in front, others with connections in back. Ten models equipped with louvres.



FAMOUS  
RIPPLE-FIN CONSTRUCTION

Full information about McQuay Unit Coolers is available from the McQuay representative in your city, or write McQuay, Inc., 1643 Broadway Street Northeast, Minneapolis 13, Minnesota.

# *McQuay* INC.

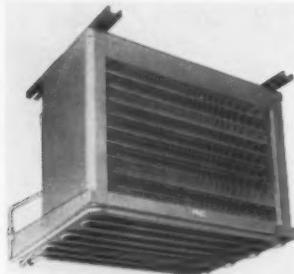
HEATING • AIR CONDITIONING • REFRIGERATION

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## DEFROSTING EQUIPMENT

**BUSH MFG. CO.**  
Booths 116, 118



**FEATURED PRODUCT**—"Therm-O-Cycle" hot gas defrosting system utilizing room air passed over a re-evaporator coil to furnish the heat required for defrosting. This special re-evaporator supplies an unlimited amount of heat, yet requires no storage reservoirs, complicated re-boilers, or other devices. Proven dependable, automatic, and trouble-free in thousands of fixture installations, this system now is available for larger commercial installations. All components designed for convenience of installation and servicing. Minimum box temperature rise.

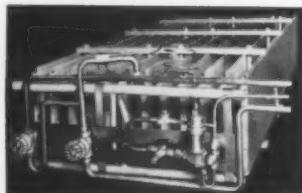
(Other products include air handling units, cooling towers, industrial fin tube.)



### OUR VIEW FOR '52—

"Although we are all suffering dislocations due to our defense economy, our industry is a vital segment in this defense effort. We feel that there will be a continued demand for our products which will be augmented by the introduction of new products during 1952."—J. A. MULCAHEY, director of sales.

**DOLE REFRIGERATING CO.**  
Booths 312, 314



**FEATURED PRODUCT**—The Dole hot gas defrost bank, which provides an easy, quick, automatic method of defrosting overhead plate banks for low temperature rooms. The hot gas defrost banks may be installed in multiple or singly with other cooling surface in the same system, the company asserts.

(Other products include Ice-Cel, milk cooler assembly, special plates and finishes, truck valves, freezer stand, salad counter with stainless steel plate.)



### OUR VIEW FOR '52—

"The commercial refrigeration and air conditioning industry has not been influenced by the so-called scare buying of the past 15 months. Refrigeration equipment is not bought as a spare or lay-away item. The industry's condition today is healthy, and future prospects, except in case of large-scale war operation, give great hope for continued success."—L. E. SMITH, sales manager.

**METALS & CONTROLS CORP.**  
Booths A-328, A-332



**FEATURED PRODUCT**—"Klixon" model C4391 defrost thermostat specially developed for use by refrigerator manufacturers in connection with automatic defrosting.

(Other products include dome-mounted protectors for hermetics, motor starting relays, and other types of thermostats.)

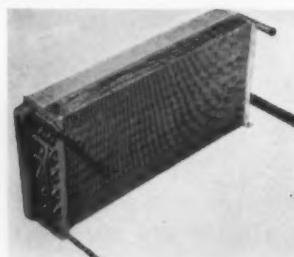
**OUR VIEW FOR '52—**"We believe the materials restrictions will be a greater problem to our customers than they will to us, because our units are relatively small. While we are increasing our production on war work, we certainly expect to be able to keep in a position to take care of any demands the refrigeration industry might put on us."—J. OTTMAR, sales promotion manager.



**OUR VIEW FOR '52—**"The availability of Heat-X products in 1952 will depend largely on the general material picture. On the basis of present allocations, we should be able to do fairly well on deliveries.

In a defense economy such as the present there is increasing demand for heat transfer products of all types, and our designs should fit nicely into many of these requirements."—B. W. RIST, sales manager.

**HEAT-X-CHANGER CO., INC.**  
Booth 238



**FEATURED PRODUCT**—For use in a hot gas defrost system, the new Heat-X condenser re-evaporator combines the functions of a re-evaporator coil and the condenser in one compact unit, for mounting on the compressor base. Using longitudinal inner fin tube construction, the re-evaporator section of the condenser takes the heat required for defrosting from the room air passed over it by the condenser fan. Operation is fully automatic. Available in both air cooled and combination air-and-water cooled models.



HIGH  
STABILITY



LOW  
WAX..

## REFRIGERATION OIL

THE NEW . . . IMPROVED . . . ANSUL REFRIGERATION OIL . . . IS A RESULT OF THE PERSISTENT SEARCH BY ANSUL CHEMISTS AND REFRIGERATION TECHNICIANS FOR THE FINEST QUALITY REFRIGERATION OIL . . . AT ANY PRICE!

Since Ansul Refrigeration Oil was introduced in 1949 . . . its acceptance by refrigeration men has continued to expand. In only two short years Ansul is one of the leading refrigeration oils sold exclusively through Refrigeration Wholesalers.

The New . . . Improved Ansul Refrigeration Oil is now available at leading refrigeration-wholesalers everywhere. It meets, or surpasses, every specification established by Ansul Research for a high quality refrigeration oil.

**BUY IT AT THE NEW LOW PRICE.** Use it for more dependable, trouble-free lubrication.

ANSUL SULFUR DIOXIDE • ANSUL METHYL CHLORIDE  
ANSUL OIL • KINETIC "FREON" REFRIGERANTS

• ALSO MANUFACTURERS OF INDUSTRIAL CHEMICALS • DRY CHEMICAL FIRE EXTINGUISHERS

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and AIR CONDITIONING • NOVEMBER, 1951



THE FINEST  
REFRIGERATION  
OIL

at any price!



..AND  
LOW MOISTURE, too!

### NOTE THESE OUTSTANDING ANSUL OIL FEATURES

\*Lower floc point.

\*50% lower wax content.

Moisture — ANSUL CONTROLLED minimum.

\*Lower pour point.  
Rigidly checked for high stability.

\*Lowest affinity for moisture.

New low price.

Available in quart, 1-gallon and 2-gallon cans; also in 5-gallon and 55-gallon steel containers.

\*Improved features

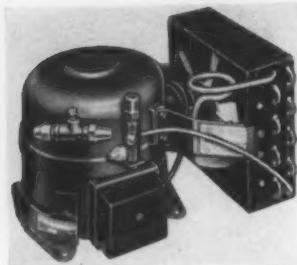
Ansul has greatly increased its Research facilities — expanded its Research Program — and added new modern Pilot Plant facilities to better serve the Refrigeration Industry.

**ANSUL**  
CHEMICAL COMPANY  
REFRIGERATION DIVISION  
**MARINETTE, WISCONSIN**

## COMPRESSORS, CONDENSING UNITS, PUMPS

SERVEL, INC.

Booths A-304, A-306



**FEATURED PRODUCT**—Model CM-20 1/5-hp "Supermetie" capillary tube type condensing unit, smallest model in a complete line of hermetic condensing units ranging through 3 hp for commercial applications. Hermetic power units in sizes from 1/3 to 5 hp for high temperature requirements also will be shown. Construction and performance will be demonstrated by cutaway models.



### OUR VIEW FOR '52—

"Servel's plans for condensing unit production for 1952 are based on the belief that there will be a need for this product both in the defense program and in a minimum civilian economy.

At this stage it seems that the availability of copper will be the limiting factor. In any event, we intend to produce to the limit of material allotted by NPA. Servel feels that the increasing demands of several markets in refrigeration and air conditioning will be in excess of our ability to deliver."—GEO. S. JONES, Jr., vice president and assistant to the president.

LYNCH CORP.

Booths 217, 221, 225

**FEATURED PRODUCT**—R-39 refrigeration pump. This pump is a redesigned version of the old S-500 compressor, and used on 5-ton and 7½-ton heavy duty Par condensing units. Features include new suction manifold of the up-sweep type with large settling chamber and suction strainer, redesigned valve plates with reed type flapper valves on the suction sides, new compression and oil rings, full floating piston and link pins, and Crane seals.



### OUR VIEW FOR '52—

"With the addition of several new models to the Par condensing unit line, we feel the market potential for our product is at least as good in 1952 as it has been in 1951."—A. V. PETERSEN, assistant sales manager, Par Compressor Div.

DISTILLATION PRODUCTS  
INDUSTRIES

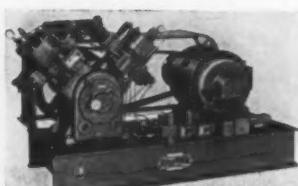
Booth 403

**FEATURED PRODUCT**—"Dryer compressors faster with DPI high vacuum" will be the major theme of this display. A secondary theme of the display will relate to the use of "high vacuum metallization" to dress up the ever increasing number of plastic parts used in refrigerator construction. On display will be a new type vacuum pumping cart of the type used to evacuate and dry compressors on a continuous, mass production basis. The unit moves while

the pumping operation is being accomplished. Also, large size vacuum booster pumps along with valves, recording and portable type multi-station gauges will be shown to round out the list of equipment needed by a refrigeration equipment manufacturer to cut production costs to a minimum. Samples of refrigeration panels and name plates showing the use of high vacuum metallization as a decorative process also will be displayed.

BRUNNER MFG. CO.

Booths 224, 228, 232, 222, 226



**FEATURED PRODUCT**—Model R-40,000 compressor. A 40-hp unit set up for 40 and 50-hp service in either motor-compressor type or water-cooled type, as required. Four cylinders, 90-degree V type. Bore, 4½ inches; stroke, 5 inches. Lubrication under pressure provided by large size pump attached to end bearing and driven directly from crankshaft. Oil level can be ascertained at a glance by means of large bull's-eye in end of crankcase. Suction and discharge valves are of reed type, simple in design and of minimum clearance volume. High pressure cut-out provided, as is protection against oil failure. Cylinder unloading and capacity control is optional.



### OUR VIEW FOR '52—

"We are convinced that the outlook for refrigeration equipment for 1952 indicates a banner year ahead for the industry, provided, of course, that materials for civilian use are not curtailed to limit the production of this type of equipment. We believe that there will be a tremendous demand for refrigeration equipment, and we are very optimistic for the year 1952, and in setting up our budgets, we are anticipating a substantial increase over 1951."—A. G. ZUMBURN, president.

for PEAK  
PERFORMANCE

*on all installations*

buy SPORLAN  
right  
down the  
line!



For All Sizes and Types of Refrigeration and  
Air-Conditioning Applications  
*Sporlan Manufactures*

SOLENOID VALVES • SOLENOID PILOT CONTROLS  
MODULATING PILOT CONTROLS • REFRIGERANT DISTRIBUTORS  
STRAINERS • CATCH-ALL FILTER-DRIERS  
and the Only THERMOSTATIC EXPANSION VALVES with  
FLOW MASTER ELEMENTS AND SELECTIVE CHARGES

SPORLAN VALVE COMPANY  
7525 SUSSEX AVE. • ST. LOUIS 17, MO.

SPORLAN

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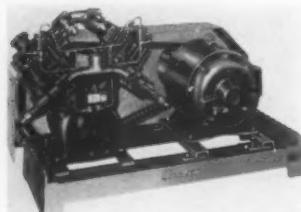
## TECUMSEH-UNIVERSAL COOLER

Booths 108, 110



## CURTIS REFRIGERATING MACHINE DIV.

Booths 431, 435, 436, 442



**FEATURED PRODUCT**—Expanded line of hermetic condensing units including models through 3 hp in all back pressure ranges for either F-12 or F-22, and a redesigned line of Universal Cooler conventional compressors, including oil pumps, improved seals, multi-port suction and discharge valves, and large volume suction and discharge mufflers.



## OUR VIEW FOR '52—

"The forecast for the year 1952 indicates that there will be a very substantial demand for refrigeration products and that some branches of the industry may reach an all time high."

The probabilities are that total volume will be somewhat under the 1950 peak and perhaps about equal to the current year. However, there are some imponderables that may change any generalization on market potential."—  
L. W. LARSON, sales manager.

## PEERLESS OF AMERICA, INC.

Booth 334



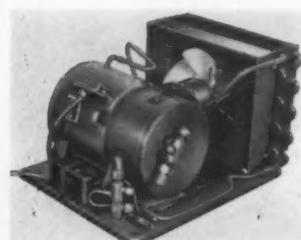
**FEATURED PRODUCT**—The new Peerless "Dripump" for removing condensate from drip pans in walk-in coolers, self-contained air conditioners, comfort coolers, or any job in which condensate removal is a problem. The pump lifts condensate from the drip pan and carries it to a drain outside the refrigerated fixture or

area. Eliminates unsightly drain lines. Unit is available in two sizes with a lift capacity of 3 pints of water per minute at 3 to 15 foot head.

(Other products include panel coolers, corner unit cooler, dome and unit coolers, "pie-plate" coil, gravity coils, plate coils, ice cube makers.)

## GENERAL ELECTRIC CO.

Booths 309, 311



**FEATURED PRODUCT**—Model SA4-AL1  $\frac{1}{4}$ -hp condensing unit, typical of General Electric's new line of hermetics, features high capacity with low power input; space-saving, compact design; quiet, smooth operation; dependable performance. The line includes 10 standard models from  $\frac{1}{6}$  through  $\frac{1}{2}$  hp, for low and high temperature, capillary tube and expansion valve applications. These units are ideally suited for manufacturers of refrigerated cabinets and fixtures and replacements are available through more than 90 authorized refrigeration equipment wholesalers located throughout the country.



## OUR VIEW FOR '52—

"In 1952, we expect a heavier impact of the defense program, with increasing difficulties in material procurement. The military will require more refrigeration and air conditioning,

while civilian users are likely to feel a pinch in meeting their needs. The ever widening application of refrigeration and air conditioning will bring increasing demands on our industry, and offer an even greater opportunity for manufacturers, wholesalers, dealers and servicing organizations."—H. B. DONLEY, manager of marketing.

RX

# PREScription

## FOR MAKING GOOD REFRIGERATION SYSTEMS BETTER

### IMPERIAL TRIPLE-SEAL FITTINGS . . .

A groove in the seat brings you triple-seal tightness in every joint.

### IMPERIAL TUBING TOOLS . . .

A complete line of the finest in tubing tools—for cutting, flaring, bending, reaming, swaging, pinch-off and soldering.

### IMPERIAL DIA-SEAL VALVES . . .

No springs—either-way flow, only two moving parts, easy finger-tip action, long-life diaphragm.

### IMPERIAL TORPEDO DRIERS . . .

One-piece shell. Filtering area graduated with drier capacity. Refillable and non-refillable types.

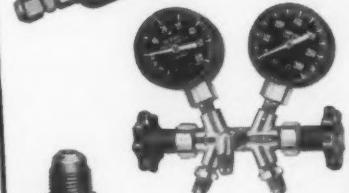
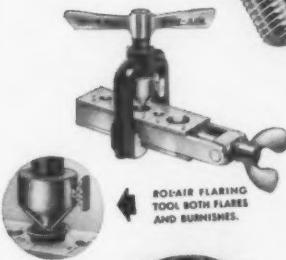
### IMPERIAL CHARGING AND TESTING UNITS

Double gauge, Hi-Lo single gauge and standard single gauge units; kits for hermetic units—compact, convenient, forged brass construction.

### IMPERIAL "Diamond Eye" LIQUID INDICATORS

Straight through liquid indicator with clear vision double sight ports. "Eye" shows at a glance if system lacks refrigerant.

**Ask for Catalog 80-A**  
**See Your Jobber**



THE IMPERIAL BRASS MFG. CO., 536 S. RACINE AVE., CHICAGO 7, ILL.

In Canada: The Imperial Brass Mfg. Co., 33 Church St., Toronto, Ontario

# IMPERIAL

FITTINGS • VALVES • DRIERS • FILTERS  
FLOATS • CHARGING LINES • TOOLS  
for Cutting, Flaring, Bending, Pinch-off, Swaging



Circle No. 47 on Reader Service Card for more information

and AIR CONDITIONING • NOVEMBER, 1951

# KOLD-HOLD

SYMBOL OF SUPERIOR REFRIGERATION



let **KOLD-HOLD** show you

**why "serpentine" design cuts  
your refrigeration costs**

Take a good look at the cross section of a Serpentine Plate in my right hand for it holds the key to refrigeration savings for you. Notice that the channels through which the refrigerant flows are formed by joining a flat metal sheet to an embossed metal sheet. There is no internal tubing or piping so the refrigerant is in direct contact with the surface to provide the equivalent of 100% prime surface. The size of the refrigerant passage and the smooth contour of the return bend reduce pressure drop to the absolute minimum. Plates can't possibly become clogged or oil logged. So you see, the Serpentine design gives you more efficient refrigeration with less trouble and for less money. And the flat top surface of the Serpentine Plate is really handy. It adapts itself readily to the construction of shelves, stands and banks to add extra convenience to your holding and freezing rooms.

Why pay more for refrigeration when you get more efficient refrigeration by using Kold-Hold Plates with Serpentine design. Send for full details today.

# KOLD-HOLD

protects every step of the way

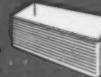


PLATE BANKS



PLATE STANDS

PREFABRICATED LINERS



SERPENTINE EVAPORATORS



"HOLD-OVER" PLATES

KOLD-HOLD MANUFACTURING COMPANY 503 E. Hazel St., Lansing 4, Michigan

Circle No. 48 on Reader Service Card for more information

## ALLIS-CHALMERS MFG. CO.

Booths 477, 479



**FEATURED PRODUCT**—Redesigned close-coupled pump unit engineered for a wide range of fractional horse-power applications, including air conditioning jobs. Pump and motor are on single shaft. Pump fitted with a flexible mechanical seal which compensates automatically for wear and requires no attention over long periods of operation. Rigid shaft provides perfect alignment of impeller and mechanical seal. Simple two-screw mounting bracket makes it easy to mount pump in any position as long as motor end of shaft is above horizontal.

### OUR VIEW FOR '52—

"Allis-Chalmers is continuing in the development and production of motors, drives and pumping equipment designed to contribute to the advancement of the refrigeration and air conditioning industries and in the solution of their problems. For the present, however, such production for these industries is limited by the CMP allotment or DO rating available."—C. W. SCHWEERS, vice president in charge of sales, general machinery div.



## FRICK CO.

Booth 325

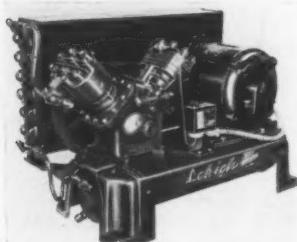


**FEATURED PRODUCT**—New 9-cylinder "Eclipse" compressor for Freon-12. Smooth operation, with compression strokes occurring uniformly every 40 degrees per revolution. Speeds 725 to 900 rpm. Requires less than 23 sq. ft. of floor space. Capacity

of 90 tons on air conditioning work. Capacity controls and unloaders supplied when wanted. Force-feed lubrication. Crankcase holds 7 gallons of oil giving large reserve capacity. Patented "Flexo-Seal" at shaft.

## LEHIGH MFG. CO.

Booths 308, 310



**FEATURED PRODUCT**—Model AM-101F 1-hp "Blu-Cold" air cooled condensing unit.



### OUR VIEW FOR '52—

"The outlook for '52 is obscure. This influences our planning mainly from the standpoint of balancing and tapering inventory. We recognize full well that the international situation can sway conditions suddenly. However, we feel material will be available to cover a reduced volume of condensing unit business."—RALPH HAYES, general manager.

## BEVERAGE AND LIQUID COOLING EQUIPMENT

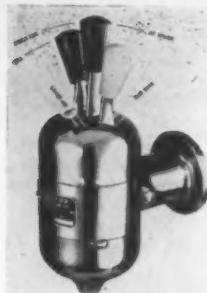
### TEMPRITE PRODUCTS CORP.

Booth 338



**FEATURED PRODUCT**—Remote type cooler, model RT-5, designed for use in connection with existing drinking fountain fixtures where other types of water cooling may prove unsatisfactory or where the existing refrigeration equipment has failed or is obsolete and yet the fountains and dispensers may be in good shape. These units include all necessary features of the most complete pressure bubblers self-contained coolers with the exception that they do not have a cabinet top or bubbler.

**OUR VIEW FOR '52**—"We feel that the year 1952 will be a year of some curtailment of civilian production. However, we plan on increasing our production facilities to the point where we truly hope that the armed forces requirements can be taken care of and that a satisfactory amount of civilian production can also be maintained."—JAMES J. GOODWIN, general sales manager.

**CARBONIC DISPENSERS, INC.****Booth 551**

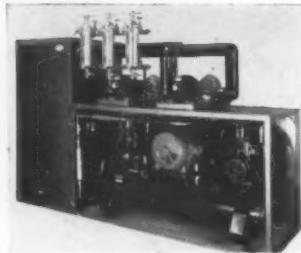
**FEATURED PRODUCT**—Self-contained beverage dispensers of a high capacity type, and a new 5-in-1 self-mixing faucet which will dispense three flavors, plain soda and a high pressure jet steam for making ice cream sodas. The new beverage dispenser units are designed for ball parks, drive-ins, stadiums and similar locations where beverages are consumed in large quantities in a short period of time.

**OUR VIEW FOR '52**—“We believe the potential for either the self-contained dispenser or our 5-in-1 ‘Mix-Monitor’ faucet is limited only by the number of locations in which beverages are dispensed. We plan to produce as much of this equipment next year as materials will permit.” —E. W. BAILEY, president.

**CORNELIUS CO.****Booth 475**

**FEATURED PRODUCT**—Push-back water faucet, plus ring seal type tap rod and barrel tap made of forging instead of casting. Tap rod is believed

to be foolproof. Also regular line of beer faucets, air distributors, NK regulators, beverage and air hose, plus Models K and GXA compressors.

**FILTRINE MFG. CO.**

**FEATURED PRODUCT**—Completely packaged circulating water cooling system which supplies properly chilled chlorine-free water to as many as 300 drinking stations at a rate up to 400 gallons of 50-degree water per hour. In addition it generates up to 150 gallons of reserve chilled water to meet extra-heavy demand. Smaller

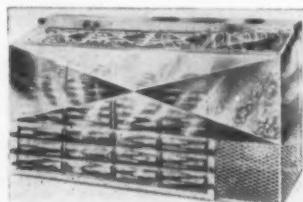
models in a complete range from 3 outlets up have same ratio of storage to capacity. Built with two balanced evaporators to prevent pressure drop. Heavy duty bronze-fitted pump with enclosed impeller circulates water with equalized pressure to all outlets.

**SUPERFLOW MFG. CO.****Booth 516**

**FEATURED PRODUCT**—New dispensing system for bulk beverages, both carbonated and malt. High and low side packaged together in dispenser unit. Beverage dispensed with instantaneous cooling to desired temperature as drawn. Complete refrigeration accomplished by circulation of beverage itself. Diaphragm pumps and thermostatic pressure control are combined in a small distribution panel placed at tapping station. Eliminates need of pre-cooler or secondary refrigeration.

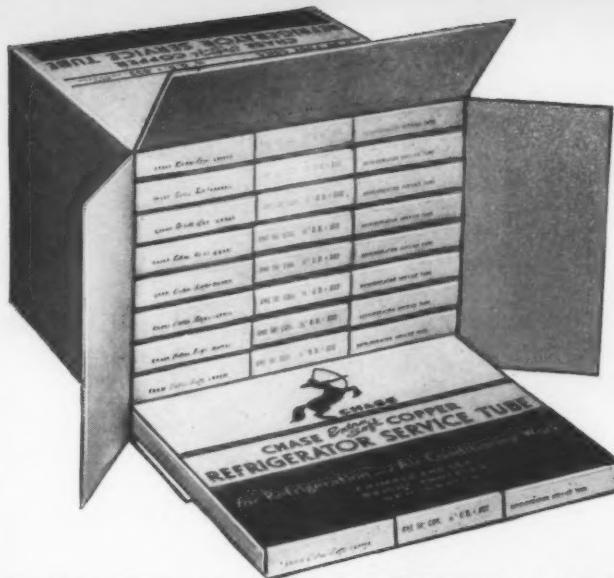


**OUR VIEW FOR '52**—“Superflow, with its exclusive features of balanced refrigeration and balanced automatic pressure, is now offering exclusive franchises to a limited number of distributors. Government allocations will allow sufficient materials to adequately supply a maximum of ten additional distributors. Our field activity during 1952 will be limited to that number.” —W. RAY KROMER, president.

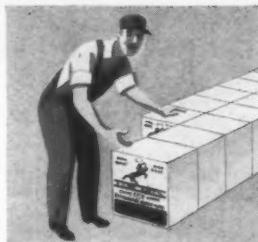
**UNITED FRIGUATOR ENGINEERS****Booth 454**

**FEATURED PRODUCT**—“Drinkmaster” combination beverage cooler.

**OUR VIEW FOR '52**—“We feel that the necessary curtailment of critical materials makes it incumbent on us to discontinue the slower moving items in favor of our ‘Drinkmaster’ line, which is now our best seller. This policy should enable us to make and sell more Drinkmasters during 1952 than we are building in the current record year of 1951.” —RAY W. NEUMAN, proprietor.



# The new CHASE COPPER REFRIGERATOR SERVICE TUBE PACKAGE Helps you *SAVE*



## Saves Time!

Handy because tube slides out easily. Unused tube slips back in without effort.

## Saves Energy!

Easy to move and to identify sizes and specifications on end of package.

## Saves Space!

Every package is made of strong corrugated boxboard. Flat, easy to store.

## Saves Money!

Every carton packed carefully and securely for safe and economical shipping.

AND INSIDE this better package **A** is the best Copper Refrigerator Service Tube you ever used. Chase copper tube is extra soft and uniform in temper—making it easy to work and easy to bend.

Controlled annealing makes it clean, bright, oxide-free—and the Chase new end seal *keeps* it clean and dry inside. Made in  $\frac{1}{8}$ " to  $\frac{3}{4}$ " diameters in standard 50' lengths, stamped with the name Chase.

**Chase**  **BRASS & COPPER**

WATERBURY 20, CONNECTICUT • SUBSIDIARY OF KENNECOTT COPPER CORPORATION

\* The Nation's Headquarters for Brass & Copper

Albany†  
Atlanta  
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FREE BOOK gives sizes, weights, packaging and installation data on Chase Copper Refrigeration Tube.



Chase Brass & Copper Co., Dept. CR1151  
Waterbury 20, Conn.

Please send me your Free Book on Chase Copper Refrigeration Service Tube.

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Street \_\_\_\_\_

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Circle No. 49 on Reader Service Card for more information

and AIR CONDITIONING • NOVEMBER, 1951

**UNIVERSAL COOLER'S answer to water conservation problems!**

# AIR COOLED



*... under normal conditions!*

# WATER COOLED,

*... too, when extreme conditions require!*

## NOT A "HALF-AND-HALF" COOLING SYSTEM

Gets quick approval where building codes require conservation of water!

Write for copy of New York Water Dept. letter approving this condensing unit.

Fully air cooled and delivers its rated output without the use of water in normal operating conditions.

Water-cooling system automatically activated only when extreme conditions require the use of water to maintain the rated capacity of unit.

**Additional protection at little extra cost. Sizes:  $\frac{1}{2}$  H.P. through 3 H.P.**



**UNIVERSAL COOLER**  
MARION, OHIO  
*Division*

TECUMSEH PRODUCTS COMPANY, TECUMSEH, MICH.

EXPORT DEPT.: 2111 WOODWARD AVE., DETROIT, MICH.

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NOVEMBER, 1951 • COMMERCIAL REFRIGERATION

**UNIFLOW MFG. CO.**

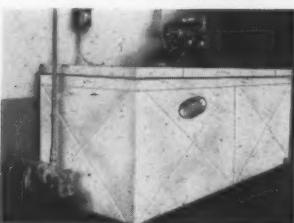
Booths A-324, A-326

**HEDEMAN PRODUCTS**

Booth 511

**HAVERLY ELECTRIC CO.**

Booth 521



**FEATURED PRODUCT**—New soft drink dispenser in a variety of models with three-way faucets available on either the front of the cabinet or the gooseneck type on the top of the cabinet. Comes complete with an attached cabinet for syrup tanks which can be remoted away from the dispenser or left attached to the dispenser. Will give four different flavors of carbonated soft drinks, plus plain soda and ice water. Capacity large enough to meet peak periods or a long continuous draw at low temperature.

**OUR VIEW FOR '52**—“We feel that a wide volume for this type of dispenser exists in taverns, ball parks, drive-in theaters, restaurants, and amusement places and concessions of all types. We further believe that the materials will be available in 1952 to produce this dispenser in a large volume.”—M. A. MARTIN, vice president.



**FEATURED PRODUCT**—Flexible Koroseal tubing armored with stainless steel braid will highlight the exhibit of Hedeman Products. This tubing, according to the manufacturer, will withstand pressures up to 2000 psi, and is designed to provide one good answer to the shortage problems that currently are facing the manufacturers of refrigerated beverage dispensing equipment.

**OUR VIEW FOR '52**—“The need for components for original equipment installations and maintenance has already been affected by government restrictions on metals. Practical replacements for solid

wall lead lines are becoming vitally important in the continued operation of many manufacturing and service organizations. Our product, we feel, will provide one good answer to some of these shortage problems.”—ROBERT M. HEDEMAN.

**OUR VIEW FOR '52**—“Because of the tightness of the copper situation, production of our new water chilling units will naturally be limited for the immediate future. These units have applications in such highly essential uses as dairies, milk plants, bakeries, bottling plants, poultry processing, and numerous places in industry. Long-range, the outlook is good, but materials shortages will hold down present output.”—C. U. HAVERLY, Sr., president.

**HEAT EXCHANGE EQUIPMENT****ACME INDUSTRIES, INC.**

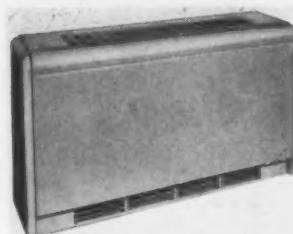
Booths 244, 246



**FEATURED PRODUCT**—Model HX heat exchanger. Newly designed, offers extremely low pressure drop and provides maximum gains in the refrigeration system for any desired super-heating effect. Gas side of units may be packed with unequalled amounts of secondary surface. Danger of liquid slop-over is reduced. Smaller models suitable for either Freon 12 or 22; larger models standard for Freon 12 but available for Freon-22 on special order. Tested in accordance with ASME code for unfired pressure vessels.

**OUR VIEW FOR '52**—“1951 marked Acme's most successful year. We have every assurance that 1952 will be even greater. Our long range development program designed dually for the release of new products and the redesign of present products has been very successful. Our production facilities have been expanded and our organization streamlined to give customers the finest service possible.”—K. A. WEATHERWAX, president.



**McQUAY, INC.****Booths 428, 432, 434, 438**

**FEATURED PRODUCT**—The Seasonmaker, an individual room air conditioner principally designed for multi-room buildings. The cooling and heating medium is supplied from a central plant. Unit cools and filters in summer, heats, dehumidifies and filters in winter. Three types are available: floor type, for free standing mounting along a wall; basic type, for fully recessed installation; ceiling type for suspended mounting. Units rated at  $\frac{1}{2}$ , 1 and 2 tons, deliver 200, 400 and 600 cfm respectively.

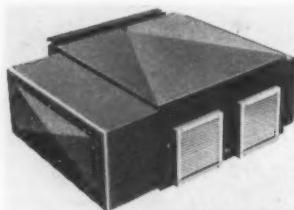
**OUR VIEW FOR '52—**

"Government controls of materials, plus the possibility of a limitation order that will prohibit manufacture of many items, make it impossible to forecast what 1952 holds in store for us and other members of our industry. However, given reasonable freedom of action, I am convinced that 1952 would produce a satisfactory volume of business for all industry segments."—H. BLAKE THOMAS, vice president, sales.

**TENNEY ENGINEERING, INC.****Booth 124**

**FEATURED PRODUCT**—A special activity is being planned by Tenney for its exhibit at the Show, but all details are being withheld until plans have been completed. The company will display a complete line of low side equipment, including an all-cop-

per finned coil designed for particular applications in process heating and cooling operations. An aluminum ice cube maker for use with reach-in boxes which require frozen food compartment also will be shown.

**LARKIN COILS, INC.****Booths 123, 125**

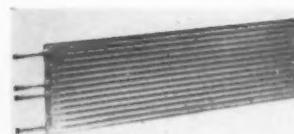
**FEATURED PRODUCT**—A new complete line of commercial and industrial air conditioning units, comprising seven ceiling and seven upright models, ranging in nominal capacity from 2 to 40 tons. To each basic unit may be added 12 optional items: face and by-pass damper, filter, decorative end and back panels, adjustable louvers, insulation, hot-dip galvanizing, humidifier and eliminator, heating coils, expansion valves, heat exchangers, and two-speed motors. New units replace the present 5-model, 3 to 20-ton line.

**OUR VIEW FOR '52—**

"My trips around the country and close observation of conditions at home convince me of two things for '52: that material is going to be harder to get and that the demand for refrigeration equipment will exceed the supply. We expect to obtain more orders for the defense program next year; and to help stretch materials as far as possible, we are studying (but not now using) possible substitutes."—O. M. SIMS, president.

**DEAN PRODUCTS, INC.****Booth 203**

**FEATURED PRODUCT**—"Job tailored" evaporator plates for all types of low temperature equipment and applications. Available in all sizes and shapes such as cylinders, U's, angles, tanks, etc. Can be supplied in zinc metallized steel, stainless steel, and other metals.

**OUR VIEW FOR '52—**

"The availability of our evaporator plates will parallel the Government allotment program. A good portion of our market will be expanded considerably, since it will reflect Government purchases due to the defense program. Our civilian program will also be bolstered by the fact that a good portion of our plates are being sold to projects which are directly or indirectly tied in with the defense program. The need of our products in relatively new fields of refrigeration also will help broaden the base of our distribution."—WALTER RASKIN, treasurer.

**ELECTRIC MOTORS****EMERSON ELECTRIC MFG. CO.****Booth 524**

**FEATURED PRODUCT**—Dust-proof centrifugal starting switch which will be seen in operation on a typical motor application, the motor being cut away so the moving parts are

clearly visible. Samples of the company's new 15-hp 2-pole hermetic motor for commercial size units also will be shown.

# WITH THE **COLDIN** LINE . . . YOU CAN SELL **EVERY RETAILER!**

**YOU'LL HAVE THE MODEL-PRICE-AND QUALITY**



AGL-70  
OPEN FREEZER

WDP-BH  
DAIRY WALL CASE



125CTD  
FROZEN FOOD  
IDEAL FOR  
SMALLER STORES



215CTD  
FROZEN FOOD  
8 FT. MERCHANDISER

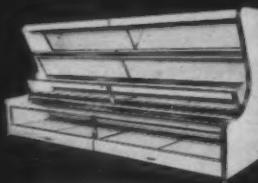


LT-4  
"SPOTLIGHTER"  
CAKES, ICE-CREAM, ETC.



IRB-SC  
FORMICA TOP  
COUNTER & DISPLAY

HK12  
SUPER SERVICE  
OPEN DAIRY  
8 & 12 FT.



THERE'S A  
**COLDIN**  
MERCHANDISER

for every retailer . . .

at a price

he wants to pay

**COLDIN** makes display cabinets for retail stores . . . nothing else. That's why our distributors have the edge over competition. They can offer the retailer the right cabinet for his particular need. They can offer features and prices that beat anything competition can meet, plus, the best guarantee in the business.

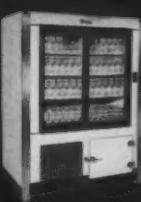
- ★ 2 YEAR FOOD SPOILAGE INSURANCE
- ★ 5 YEAR REFRIGERATION WARRANTY
- ★ COLDIN GUARANTEE OF SATISFACTION



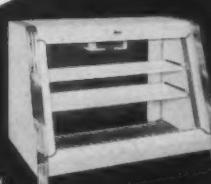
OPM 210  
MODERN DAIRY  
OPEN TYPE



VX6  
DISPLAY & STORAGE



BWS4-SC  
SELF CONTAINED  
DAIRY



FV41-6  
FULL VISION  
DAIRY & DELI  
4, 6, 8 & 10 FT.



RS-5  
ALL-PURPOSE  
MERCHANDISER



DEALERS — WRITE FOR CATALOG AND INFORMATION

YOUR KEY TO  
BETTER REFRIGERATION

**COLDIN CABINET CO. INC.**

2800 Webster Ave., N. Y. 58, N. Y. • CYPress 5-3311

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and AIR CONDITIONING • NOVEMBER, 1951

**CENTURY ELECTRIC CO.****Booth 502****WAGNER ELECTRIC CORP.****Booth 234**

**FEATURED PRODUCT** — Cut-away model of new integral horsepower gear motor. A new special service split phase motor also will be shown, along with various new ratings and designs of fractional and integral

hermetic motors. A disassembled 5-hp splash-proof motor and a 3-hp motor of explosion-proof design also will be displayed, along with standard application motors up to 125 hp in size.

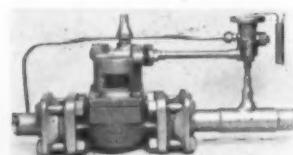
**THE HOOVER CO.****Booth 480**

**FEATURED PRODUCT** — New line of NEMA C face mounted integral horsepower motors. Built in standard NEMA frames, these units are offered in single phase, integral horsepower ratings through 3 hp, 3450 rpm, and in polyphase integral horsepower ratings through 5 hp, 3450 rpm. Two basic varieties are available—horizontal and vertical. Both varieties are drip-proof, equipped with heavy duty ball bearings, and suitable for continuous duty operation.

combination of motor and increment type starter which meets most starting current requirements and provides smooth acceleration with minimum voltage fluctuations. This combination is widely used in commercial air conditioning installations.

(Other types of products include a complete line of electric motors.)

**OUR VIEW FOR '52** — "Management in this company is optimistic concerning Hoover motor sales in 1952. Presently, we do not anticipate any sizable volume of direct defense business for the coming year. Total electric motor capacity, particularly in fractional ratings, has been expanded and, granted the materials by the NPA, we should be in a position to meet the demands of the heating, refrigeration, and air conditioning industry.—W. L. WISE, JR., sales manager.

**VALVES, CONTROLS, SWITCHES****ALCO VALVE CO.****Booth 247**

**FEATURED PRODUCT** — P. O. thermostatic expansion valve for large tonnage Freon-12, Freon-22, and ammonia installations. Eliminates parallel installation of a number of small valves, resulting in a small, compact, single control unit for capacities of 75 to 200 tons of Freon-12. This modulating valve gives stable control, resulting in high evaporator efficiency, and is more economical to install than multiple valve applications. The P. O. valve is the perfect answer to large chilled water jobs.

**OUR VIEW FOR '52**

"We think that sufficient material will be available to build control valves for all essential refrigeration installations. Fortunately, the non-essential uses of our products represent a very small proportion of our total production."—JOHN E. DUBE, president.

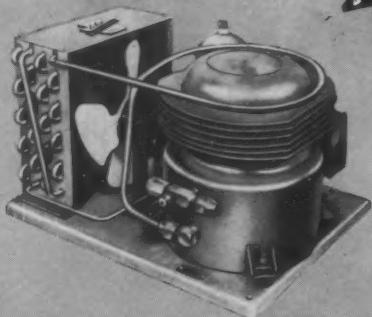
**A-P CONTROLS CORP.****Booths 241, 243**

**FEATURED PRODUCT** — A-P Controls will introduce the following new items: Model 207C expansion valve, Model 67 industrial solenoid valve, and several valves for domestic refrigerator use. The Model 209 expansion valve demonstrating unit also will be displayed, as will other mod-

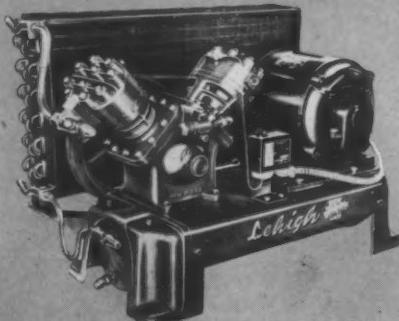
els of A-P's automatic and thermostatic expansion valves, liquid and suction line refrigerant solenoid valves, suction pressure regulating valves, pressure actuated water regulating valves, and refrigerant filters and driers.



PACKAGED TYPE UNITS FOR F12 & F22. 1/4 thru 1/2 HP.



HERMETIC UNITS—LOW TORQUE AND CAPACITOR TYPES. 1/4 thru 1/2 HP.



HEAVY DUTY UNITS—WIDE RANGE OF MODELS. 1/2 thru 3 HP.

**Lehigh**  
**BLU-COLD**  
COMMERCIAL  
REFRIGERATION

"PAY-LOAD" TRUCK UNITS BUILT FOR HARD USE.  
FOR BODY BUILDERS, FLEET OWNERS, ETC.



MANAGEMENT

**Lehigh**  
MANUFACTURING CO.

Division of LEHIGH FOUNDRIES INC.

Plant—LANCASTER, PA.

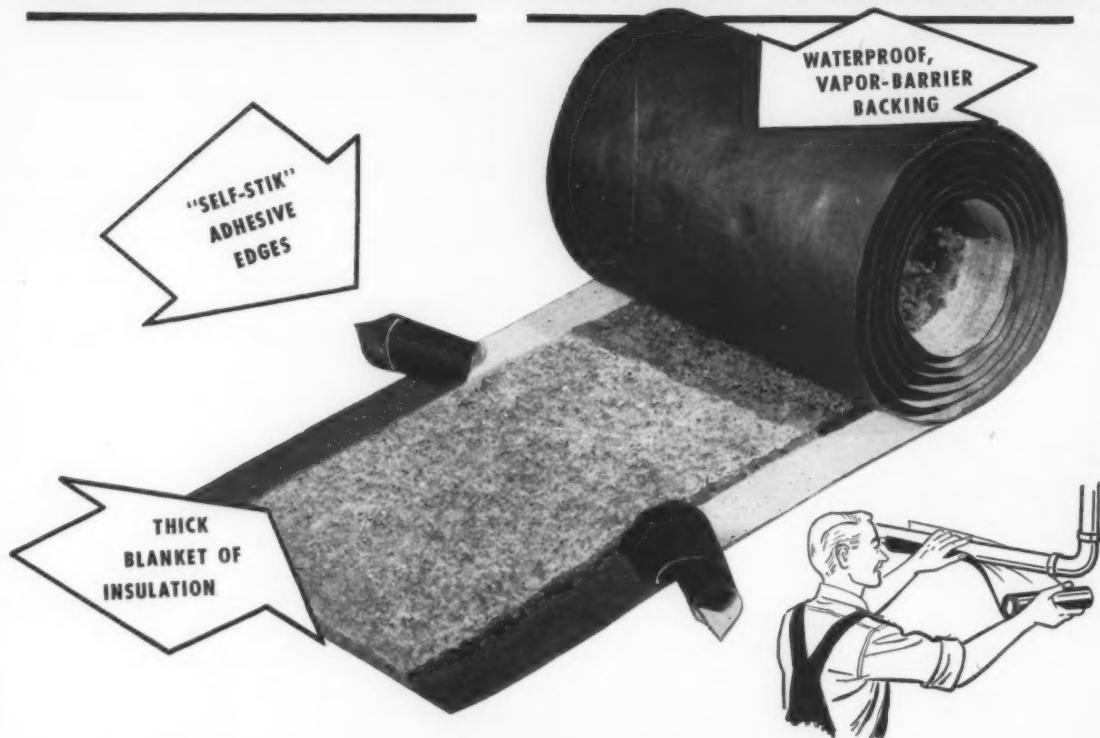
Export Dept.: 39 Broadway, New York, N. Y.

★ Manufacturers of  
Malleable & Gray Iron  
Precision Castings •  
Refrigeration Equipment • Air Valves •  
Automatic Vending Machines

Circle No. 52 on Reader Service Card for more information  
and AIR CONDITIONING • NOVEMBER, 1951



## Holds Cold and Heat • Prevents Condensation



MYSTIK DRI-PIPE—the insulation with “self-stik” edges—goes on fast, saves time and money on installation. Ideal for low-temperature applications—on cold water lines, cold air ducts, refrigeration lines. Holds temperatures, prevents

condensation and dripping, eliminates icing and frosting on refrigeration lines. Also has extensive other cost-cutting insulation uses—on warm water lines, warm air ducts and for sound deadening. Ask your supplier or . . .

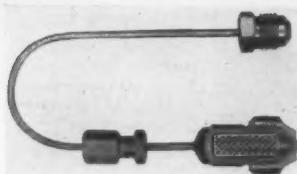
"SEE YOU IN  
BOOTH 640,  
NAVY PIER"

WRITE NOW for free sample of MYSTIK Self-Stik DRI-PIPE Insulation to Mystik Adhesive Products, 2662 N. Kildare, Chicago 39, Ill.

MYSTIK CLOTH TAPES • MYSTIK PAPER MASKING TAPES • MYSTIK SPRAY-MASK • MYSTIK PROTECTO-MASK • MYSTIK SAND-BLAST  
Circle No. 53 on Reader Service Card for more information

**ALLIN MFG. CO.**

Booth 450



**FEATURED PRODUCT**—Capillary tube providing a quick and simple mechanical adjustment of refrigerant flow to any load condition within the range of  $\frac{1}{4}$  to 1 hp. Includes large area 150-mesh monel screen, all necessary fittings, and adjustable restrictor as one integral unit. Screen

assembly can be easily removed for cleaning or replacement. Straight-through design of adjustable restrictor provides accurate means of metering refrigerant flow.

(Other products include liquid indicators, strainers, couplers, liquid dehydrant and leak detector.)

**DETROIT STAMPING CO.**

Booth A-484

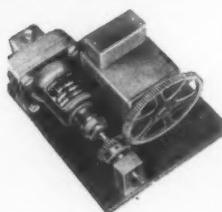
**FEATURED PRODUCT**—Compressor intake and discharge valves (flapper valves) for commercial and domestic refrigerator manufacturers. These valves are finished by a mechanical but precision operation which incidentally removes the sharp edges but more importantly polishes them to remove incipient cracks and provide better seating surface. (Other products include other critical stampings such as coined valve plates, retainers, baffles, compressor bases, and blower housings for the air conditioning industry.)

**OUR VIEW FOR '52—**

"We have confidence in the 1952 market, believing that there is a growing demand, especially for commercial units, in the defense program and supporting industries. We are certain that the industry's ingenuity will find new uses for refrigeration, which already is indispensable in the American way of life."—**GLENDON H. ROBERTS**, president.

**HUBBELL CORP.**

Booths 322, 324



**FEATURED PRODUCT**—Types SAC-6 and SFC-6 valves of the compensating type for use where a constant temperature is desired in the medium being cooled. Will increase or de-

crease evaporator pressure to compensate for increase or decrease of cooling load. Made to operate with air or electricity.

**DETROIT LUBRICATOR CO.**

Booths 415, 419, 423, 427

**FEATURED PRODUCT**—A new line of large expansion valves in capacities ranging from 6 to 25 tons will be introduced by Detroit Lubricator Co. at the All-Industry Show. The new line will be presented before a background display built around the

company's present advertising promotion which stresses the importance of proper maintenance of existing refrigeration and air conditioning equipment. Emphasized will be the slogan "Refrigeration, as Vital to American as the Food it Protects".

**SUPERIOR VALVE & FITTINGS**

Booth 239



**FEATURED PRODUCT**—Most noticeable to spectators will be the packed globe valve; line has generous openings permitting maximum flow and minimum pressure drop. It is equipped with a full floating swivel type seat holder and a metal-to-metal back seat when valve is in full open position, permitting repacking under pressure. Bolted bonnet design permits easy removal of all internal parts, a feature desirable in properly disassembling valve when making solder connections.

(Other products include: liquid indicators, ammonia relief valves and improved driers.)

**OUR VIEW FOR '52—**

"Because commercial refrigeration is vital to America, especially in times like these, there will be an increased need for our products in 1952. This will create shortages all along the line, which means that certain component parts will not be readily available. Simplification of lines and elimination of some odd sizes and slow moving items may be necessary. Spot shortages on brass accessories are likely all during 1952."—**GEORGE ALLEN**, vice president.



**INTERNATIONAL REGISTER CO.****Booth 530**

**FEATURED PRODUCT**—New line of "Inter-Matic" time switches. Recently expanded line now includes 11 different models including some designed especially for use in the automatic control of commercial refrigeration defrosting.  
(Other products include "Meter-Matic" coin meters.)

**OUR VIEW FOR '52—**

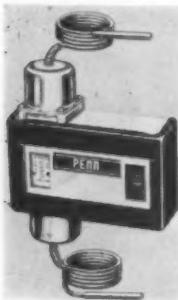
"The company has not yet had to curtail time switch production. The outlook on availability for the immediate future is good. The demand for our time switches should increase

in the coming months, due to the fact that they now are offered in a complete line, and also because of the more extensive use of time switches by dealers for controlling defrosting."—E. J. BOHNEN, vice president in charge of sales.

**HENRY VALVE CO.****Booth 460**

**FEATURED PRODUCT**—The full line of Henry Valve products will be on display at the All-Industry Show. Included in the company's lineup of products will be packed and packless

valves, driers, strainers, liquid indicators, quick couplers, relief valves, compressor valves, ammonia valves, and steel fittings. All of these are regular "line" products.

**PENN ELECTRIC SWITCH CO.****Booth 131**

**FEATURED PRODUCT**—Type 275 oil protection control for pressure lubricated refrigeration compressors. This control automatically stops compressor if oil pressure does not build up to the proper point when compressor starts, or if oil pressure drops during running cycle.

**OUR VIEW FOR '52—**

"Without material restrictions, the refrigeration industry could look forward to a peak year in 1952. Markets are expanded, product design has advanced at a rapid rate, purchasing power is high. The only brake is material restrictions and the probability of reduced production capacity for civilian products, due to high priority defense orders."—R. H. LUSCOMBE, general sales manager.

**RANCO, INC.****Booths 433, 437**

**FEATURED PRODUCT**—Complete line of refrigeration controls, including a new model designed for household refrigerator defrosting.

**JAS. P. MARSH CORP.****Booths 319, 321**

**FEATURED PRODUCT**—New Type 60, 65 and 67 series of Marsh-Electricmatic solenoid valves. Bodies machined from solid bar brass stock for added strength. Coils impregnated by special process, making them frost-proof. Smooth, positive operation. Both needle and seat are non-magnetic to prevent accumulation of particles which prevent tight seating. Series 60 are direct-acting, maximum pressure 150 psi. Series 65 and 67 are pilot operated for maximum pressures of 200 psi. All available in full range of voltages and cycles.

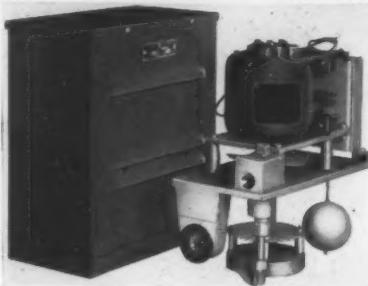
**OUR VIEW FOR '52—**

"We are very optimistic about our prospects for 1952. We have enjoyed consistent growth, our plant facilities have been expanded. The refrigeration and air conditioning industry is of vital importance to the national defense, and I believe that under the controlled materials plan our customers will be assured of a steady supply of instruments and valves."—JAMES EMMETT, JR., sales manager.

Good to the last  
*Drip*



## *Eastern* hot CONDENSATE DISPOSAL UNIT



Automatically removes hot condensate  
from air conditioning units . . . .

This completely automatic unit disposes of hot liquid condensate at temperatures up to 200-210°F. It's easily installed in air conditioning, or similar systems, where normal gravity drain-off is not possible. Quiet and reliable, it requires no oiling or maintenance during its long life. Low operating cost and rust proof construction make this compact and rugged unit a worthy investment in convenience. Complete catalog material on request.

### SPECIFICATIONS

**TANK:** Capacity — Approximately 0.8 gallons. Brass with black enamel outside.

**PUMP:** Bronze centrifugal pump. Delivery approximately 4½ GPM at 0 PSI and shut off of 12½ PSI.

**MOTOR:** 1/40 HP, 3450 RPM, single phase, 60 cycles, 115 volt, totally enclosed, ball bearing, capacitor start motor.

**WEIGHT:** 23 pounds.

**CONTROL:** A switch, operated by a float, is so set that the pump will pump out approximately 0.4 gallons of condensate at each operation.

A check valve built into the outlet prevents the outlet line draining back into the tank.

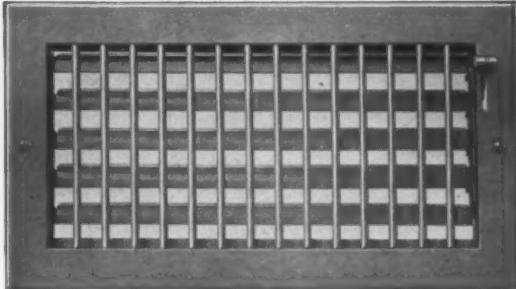
**WIRING:** The unit is provided with a knockout hole for attachment of BX Cable for the motor. All wiring is enclosed in unit.

**Eastern INDUSTRIES, INC.**  
296 ELM STREET, NEW HAVEN, CONNECTICUT

Circle No. 89 on Reader Service Card for more information  
and AIR CONDITIONING • NOVEMBER, 1951

# "AUER Streamliner" REGISTERS and GRILLES

—for high velocity Systems of  
AIR CONDITIONING AND COOLING



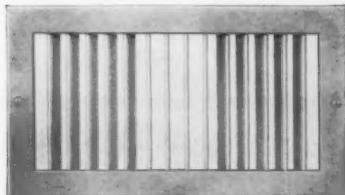
No. 1005V-HML. Single bank of adjustable bars, multi-louvre valve.

Streamliner wall registers and grilles afford a wide range of multiple deflection for air conditioning, ventilating, or cooling systems. They provide correct diffusion for high velocity outlets.

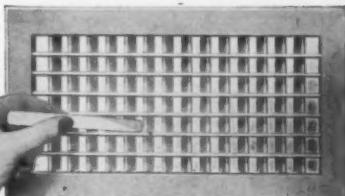
Bars are beveled, perfectly formed, and smooth in contour. They are pivoted in the frame on special split sleeves, or expansion inserts, which furnish proper tension to hold bars firmly when set, yet allow easy adjustment to the desired angle with one simple tool. Bars are shaped like an airplane wing in cross-section, and pivoted at the exact center, so they can be turned completely around. Some users prefer to turn the thin edge outward for outlets (and the broader edge toward the flow of air) cutting resistance and turbulence to a minimum. Bars may be set at any angle, in any grouping. Shutters of multi-louvre valves are pivoted on rivets to prevent vibration. All Streamliner registers are equipped with gaskets. Write for Folder S-50 with sizes and list prices.

### 8 MODELS

The Series includes models with single bank of adjustable bars (vertical or horizontal), also with double bank of adjustable bars (vertical in front and horizontal in back, or the reverse), also all above four types with the addition of horizontal multi-louvre valves in rear, controlled by lever on face of register.



No. 1005V. Single bank of adjustable bars, no valve.



No. 1205HV. Double bank of adjustable bars, no valve.

Order from your Jobber. Complete Auer Register Book—or Catalog "G" on perforated grilles — sent on request.

THE AUER REGISTER CO., 6600 Clement Avenue, CLEVELAND 5, OHIO

**Auer** REGISTERS  
& GRILLES for AIR CONDITIONING & GRAVITY

Circle No. 88 on Reader Service Card for more information

**KEROTEST MFG. CO.****Booth 242**

**FEATURED PRODUCT**—Kerotest will introduce at the All-Industry Show a new "in-line" sight glass, a new addition to its line of accessory equipment for the refrigeration and air conditioning field. The new sight glass unit is said to have a special leak-proof feature. Driers, testing outfits, and an extensive line of valves—packed and packless two and three-way line valves, angle valves, forged globe valves, compressor valves, relief valves, and check valves will be exhibited.

**OUR VIEW FOR '52—**

"DO ratings will be more important next year than ever before, in helping manufacturers to show a true picture of the essential part that refrigeration and air conditioning equipment plays in the nation's economic health. We will make our products available up to our ability to produce them, and DO ratings passed on to us by service firms and wholesalers will help us prove our real importance."—JAMES A. NORRIS, general sales manager.

**STANDARD REFRIGERATION****Booth 114**

**FEATURED PRODUCT**—Adjustable capillary valve that can be used with all types of low pressure refrigerants. Capacity will cover a range of 1/20 to 1/3 hp units employed on either high or low temperature applications. Pressure drop can be raised or lowered as required. Valve can be opened

and cleaned in case of clogging, or it can be flushed on the job and reset without any loss of refrigerant. Adjustability of new restrictor makes it possible for the service engineer to carefully balance the capillary capacity to the condensing unit and the design operating conditions.

**SPORLAN VALVE CO.****Booths 119, 121**

**FEATURED PRODUCT**—A new liquid level control, known as the "Level-Master" element, will be displayed for the first time in Sporlan's exhibit at the Show. A working model of the element, which operates with a standard thermostatic expansion valve, will be one of the central parts of the company's display. Other new Spor-

lan products and additions to the present line will include the Type W thermostatic expansion valve with a nominal capacity rating of 100 tons, the Type 90 large capacity solenoid valve for Freon-12 and ammonia installations, and the new C-410 series 'Catch-All' filter-drier.

**DRIERS, FILTERS, LIQUID INDICATORS****MUELLER BRASS CO.****Booths 212, 216, 220**

**FEATURED PRODUCT**—"Quik-Sight" liquid indicator. A new straight-through type indicator having a copper sleeve which, in closed position, covers sight glass and protects it against breakage. Two "O" rings in assembly form a positive seal against dirt and oil film when sleeve

is closed. Glass to metal soldering provides thorough tight seal for all refrigerants and eliminates need for gaskets and threaded joints. Extruded brass and copper construction. Available in  $\frac{1}{4}$  and  $\frac{3}{8}$ -inch flare connections.

**REMCO, INC.****Booth A-112**

**FEATURED PRODUCT**—Improved "Cross-Flo" drier-filter. Molded Remcal calcium sulphate drying element has increased moisture absorbing capacity and improved efficiency even at liquid line temperature as high as 150 F, and dew point temperatures as low as -60 F. Fiberglas depth filter provides vastly increased filtering capacity and improved efficiency for even the smallest capillary tube job. Increased flow area eliminates pressure drop and premature clogging.

**OUR VIEW FOR '52—**

"It is our opinion that essential refrigeration maintenance and supply material will be available even during a heavy rearmament period. There is no reason why the market potentials should not be good. There also are substitute materials which aggressive manufacturers can obtain to keep an adequate supply of their products available."—KEN NEWCUM, president.

# Pouring profits for you!



## The New Carrier Automatic Ice Maker

Here's a unique ice making plant that's a "natural" for a variety of markets. Exclusive Carrier features put it way out in front of any other product of its type . . . aggressive Carrier ad-

vertising and promotion set up sales for you. And, of course, there's a liberal dealer policy with long margins. It'll pay you to send the coupon for complete information.

**SLASHES ICE BILLS • PAYS FOR ITSELF IN SAVINGS • GIVES BOTH CUBES AND CRUSHED ICE**

**ONLY CARRIER GIVES ALL THESE FEATURES:** Large capacity in small area: Makes 450 lbs. ice a day from 4 sq. ft. of floor space. Convenience: With two large bunkers you always have ice. Choice: Cubes or crushed ice . . . just dial. Automatic: Fills bin—goes on and off automatically. Sanitary: Crystal-clear, clean ice assured. Beauty: Comes in handsome gun-metal or white baked enamel finish. Simple: Mechanism is trouble-free.

A FEW CHOICE TERRITORIES WITH GREAT POTENTIALS ARE STILL AVAILABLE

CARRIER CORPORATION, 302 S. Geddes St., Syracuse 1, N. Y.

Please send me, without obligation, information on Carrier Ice Maker.

NAME \_\_\_\_\_

FIRM NAME \_\_\_\_\_

STREET \_\_\_\_\_

CITY \_\_\_\_\_

STATE \_\_\_\_\_

Circle No. 55 on Reader Service Card for more information

and AIR CONDITIONING • NOVEMBER, 1951

**Carrier**

AIR CONDITIONING  
REFRIGERATION

**WABASH MFG. CO.****Booth 235**

**FEATURED PRODUCT**—Spotlighting the Wabash exhibit will be a new "Captube-Strainer" combination designed especially for hermetic domestic systems. In addition, a number of "Cap Tube-Dryer" combinations will be shown. These ready-to-use units will feature sweat connections and will be exact replacements for many household refrigerators now in the field.

**OUR VIEW FOR '52**—"1952 is bound to be a year during which increased government pressure will be brought to bear on the availability of essential raw materials. Despite this we feel that sufficient material will be available to take care of the increasingly important refrigeration industry. Latent recognition finally is being given our industry and all signs point to a banner year."—ROBERT E. CAPLAN, sales manager.

**COPPER TUBING****CHASE BRASS & COPPER CO.**

**FEATURED PRODUCT**—"Extra Soft" copper refrigerator service tube made of a type of copper particularly suited for this purpose, produced in extra soft temper for easy bending. The tube is completely deoxidized for absolute interior cleanliness. It is

completely dehydrated and permanently sealed. The positive mechanical end seal is the same diameter as the tube, permitting assembly of the tube up to the point of attachment without the need of removing the seal.

**AMERICAN BRASS CO.****Booth 245**

**FEATURED PRODUCT**—Demonstration of radiant panel heating and radiant cooling by use of the "heat pump" principle. Also a display of copper restrictor or capillary tubes, copper refrigeration tube, and special formed parts of copper and aluminum.

Copper water tubes and wrought fittings also will be shown along with vibration eliminators of all sizes and a display showing the various steps used in the manufacture of this product.

**VIKING COPPER TUBE CO.****Booth 485**

**FEATURED PRODUCT**—Viking refrigeration tubing, developed especially for use in this field. Ends are triple sealed to insure dryness. The tubing is made of deoxidized, electrolytically refined 99.9% pure copper. Maximum flexibility claimed because of quality-controlled annealing. Packaged in individual cartons.

**OUR VIEW FOR '52**

"The acute copper shortage is real. The copper supply is far short of sufficient to meet military and defense needs and still maintain full production of consumer items requiring copper. This condition probably will not improve in 1952. We shall continue to perform our function by producing copper tube for the most essential programs as directed by NPA. As rapidly as possible all brass mill scrap should be returned to the mill."—EDWIN C. WALTER, vice president and general manager.

**WOLVERINE TUBE DIV.****Booth 122**

**FEATURED PRODUCT**—"Trufin" integral finned tube. Made from one piece of metal, with fins being extruded from the tube wall itself. Can be formed into coils, hairpin bends, and other shapes as readily as plain tube.

**OUR VIEW FOR '52**—"We must plan carefully for the day when we shall return to a buyers' market. Although we cannot adequately fulfill our wholesaler-customers' needs at present, we must be cognizant of their problems and provide them with helpful information as to how our products can be used most efficiently."—G. D. POTTER, general sales manager.

**REVERE COPPER & BRASS, INC.**

FEATURED PRODUCT—"Dryseal" copper tube. Dehydrated, seamless, and dead soft. Ends are sealed against dirt and moisture. Furnished in flat, double-layer coils 50 feet long and subject to a variation of plus 12 inches and minus 0 inches. Available either plain or tinned on outside only. Packaging is standard in cartons containing one coil 50 feet long.

**OUR VIEW FOR '52—**

"Our view on '52, barring full scale military activity, is one of moderate optimism. This optimism is not based on an expected abundant supply of copper for civilian goods, but upon the anticipated success of the Controlled Materials Plan in bringing about an equitable distribution of the copper available. We are hopeful that the first quarter of 1952 will find this program working more smoothly, with supply and demand brought into parallel levels."—J. M. DUMSER, manager, pipe and tube sales.

**REFRIGERANTS, REFRIGERATION OILS****ANSUL CHEMICAL CO.**

Booth 248



FEATURED PRODUCT—New and improved refrigeration oil, climaxes a 16 year search for a lubricant that meets all the requirements of modern refrigerating equipment. Among the most important technical improvements of this new oil are (1) lowest floc point, does not separate wax up to minus 80 F.; (2) 50% lower wax content; (3) lower pour point; (4) lowest affinity for moisture. Packaging has also been advanced. Ansul Oil is available in the new quart and two gallon sizes, as well as the standard gallon, five gallon and 55 gallon containers.

**OUR VIEW FOR '52—**

"Any prediction about 1952 (and the sale of refrigerants and refrigeration products) must be tempered by the uncertain world situation. But despite this, Ansul looks forward to a banner year in '52. In a semi-controlled economy, where scarcities of basic raw materials limit the production of refrigerating equipment, replacement refrigerants and refrigeration products play an especially important role. We anticipate no shortages of our products—sulfur dioxide, methyl chloride and Ansul Oil."—GEORGE B. VERMILYE, sales manager, refrigeration div.

**ESTON CHEMICALS, INC.**

Booth 120

FEATURED PRODUCT—A newly developed refrigerant, "Kulene-131", plus the full line of "Charg-A-Can" packaged refrigerants. Kulene-131 is non-toxic, non-inflammable, and non-corrosive. Its chief advantages appear to be a lower compressor displacement than other commonly used refrigerants, lower compression ratio than other common refrigerants, and operating pressures sufficiently high to permit efficient operation of low-temperature equipment. Kulene-131 is the trade name for bromotrifluoromethane.

**OUR VIEW FOR '52—**

"The principal hindrance to the increased sales of refrigerants during 1951 was the continuing allocation of Freon-12. We believe that there will be an increasing demand for our packaged refrigerants as well as for Freon refrigerants in cylinders during 1952. We feel that all essential uses will continue to be covered, but in view of the increasing restrictions on containers and raw materials it does not appear likely that we will be able to return to a "free market" in '52."—A. M. ESBERG, president.

**SUN OIL CO.**

Booth 202

**OUR VIEW FOR '52—**

"There is no foreseeable shortage of 'Suniso' refrigeration oils. In fact, their availability throughout the U.S. and in many parts of the world has been improved



by the appointment of Virginia Smelting Co. as a Suniso distributor. Market prospects for these oils in 1952 are bright indeed, as the commercial and domestic uses of refrigeration and air conditioning increase by leaps and bounds."—M. A. MARKLEY, general manager, industrial products dept.

# for all water cooling use *Filtrine* —sell more condensing units

## "DO Rating" Orders are Vital . . .

Filtrine Products Meet Government Specifications

For all Federal Agencies . . . Air Force . . . Army . . . Navy . . . Marine Corps  
. . . Filtrine products meet government specifications.

### COOLERS FOR MESS HALLS — CAFETERIAS

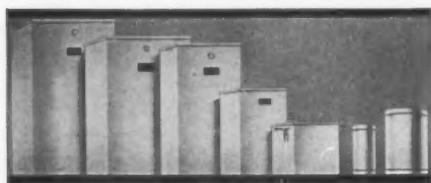
Sell your own condensing unit . . . with coolers backed by Filtrine's 40-year dependability. 1. General acceptance for high efficiency—dependability—20-year life-span construction. 2. High capacity—super storage. 3. Handsome exterior (all Stainless Steel or Duco with Stainless trim). 4. Equipped to suit with top and/or side shelves. 5. Bubblers, glass-filters, front, back, or all sides. 6. Can be "Taste-Master" equipped to banish chlorine and insure sparkling water.



No. 4  
"Taste-  
Master"  
Filter

### COOLERS FOR X-RAY & PHOTOGRAPHY

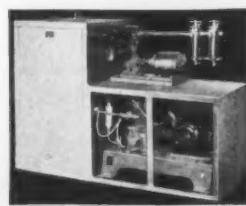
Sell your own condensing unit . . . with these Filtrine coolers as repeatedly named for military and V. A. X-ray installations; Signal Corps and Air Force dark rooms and photo labs. 1. Dependable water of correct temperature for film processing. 2. Large storage for heavy draw and emergency requirements. 3. High efficiency, economy operation—20-year life-span construction. 4. Floor mounted with Stainless Steel work-table top; also under-counter models. 5. Filters (extra) prevent scratched and pinholed negatives.



MH-300-R M-90-R MA-40-R M-25-R M-14-R X-2-R M-10-R  
MH-150-R M-75-R M-43-R M-7-R M-20-R  
M-100-R M-40-R

### REMOTE COOLERS FOR ALL USES

Sell your own condensing unit . . . with Filtrine coolers suitable for new and replacement installation everywhere: barracks, military depots, mills, schools, postoffices. 1. Capacities—5-800 g.p.h.—storage 7-300 gallons. 2. High efficiency—20-year life-span. 3. Insulation—2" hydrolene-sealed corkboard. 4. Filters and Rectifiers/Dechlorinators available for all sizes.



Typical "Packaged" Circulating Chilled Water System

### PACKAGED CIRCULATING CHILLED WATER SYSTEMS

Sell your own condensing unit . . . with complete Filtrine systems for circulating drinking water in offices, hospitals, industrial plants . . . for processing water as low as 34 deg. 1. Completely packaged for streamlined engineering, quick installation. 2. Capacities 5 to 400 g.p.h.—Storage 5 to 150 gallons. 3. Equipped with heavy-duty pump. 4. Your condensing unit factory installed. 5. Insulation—2 inch hydrolene-sealed corkboard. 6. 20-year life-span construction. 7. Filter-Rectifier assembly (extra) to kill chlorine and keep water sparkling.

Get our new "How to Sell D O Jobs". Write Dept. RF2



FILTRINE MANUFACTURING COMPANY • BROOKLYN 5 • N.Y.

"Water Coolers and Filters for 40 Years"

Circle No. 57 on Reader Service Card for more information

NOVEMBER, 1951 • COMMERCIAL REFRIGERATION

## REPLACEMENT PARTS

### DAYTON RUBBER CO.

Booth 402

FEATURED PRODUCT—The prime attraction will be Dayton's exclusive patented Cog-Belt for all types of air conditioning and refrigeration drives. Dayton's exhibit will also include merchandising displays and a variety

of wholesaler and dealer sales promotion aids. A special panel will portray the history of V-belt development by Dayton Rubber engineers in collaboration with Charles F. Kettering.

### DELAVAL MFG. CO.

Booth 219



FEATURED PRODUCT—A complete line of spray nozzles for evaporative condenser, air washer, and cooling tower applications, backed by an engineering and laboratory service to assist users in selecting the proper nozzle for each particular job.  
*(Other products include a complete line of refrigeration replacement parts.)*



#### OUR VIEW FOR '52—

"Delavan is now making its line of spray nozzles available to the refrigeration and air conditioning field through refrigeration jobbers. In 1951, a number of wholesalers built up a profitable replacement business in nozzles for evaporative condenser, air washer, and cooling tower installations. For 1952, brass shortages may slow some deliveries, but this business is expected to grow steadily, especially in areas of water shortages." —DAVID T. MORGENTHALER, sales manager.

### JARROW PRODUCTS

Booth 205

FEATURED PRODUCT—The toughest and most efficient door gasket yet produced, which will be manufactured by the Jarene Div. of Jarrow Products.

OUR VIEW FOR '52—"Government restrictions on rubber have not affected the compounds used in door gaskets. Door gaskets have had a high rubber priority and we expect to continue furnishing a crude rubber compound without quality restrictions. In our opinion we will be able to meet the demand for door gaskets in 1952 as the rubber supply appears to be adequate. For other applications where synthetic rubber is required we are furnishing the highest quality synthetics." —MYLES A. JARROW.

### BLACK, SIVALLS & BRYSON

Booth 452

FEATURED PRODUCT—Sealed type rupture disc assembly and Model CGB $\frac{1}{2}$  refrigerant valve. The former is being widely accepted as a pressure relief device which can be depended upon to eliminate loss of costly refrigerants in Freon-12 and Freon-22 systems, room coolers and packaged units. The latter is claimed to be the tightest valve ever developed to hold Freon. It will open and re-seat tightly within a very close tolerance of the required spring setting. Design also permits use of rupture disc assembly on the downstream side, since any differential pressure entrapped in the chamber between the rupture disc and valve plug will not affect the spring setting.

#### OUR VIEW FOR '52—

"The market potential for either type of relief device, rupture disc assembly or relief valve, has an unlimited field due to the increased demand for air conditioning units. If the manufacturers of refrigeration and air conditioning equipment do not have their production drastically curtailed due to material shortages we believe that our volume on relief devices applicable to such equipment will be increased at least 50% in the year 1952." —J. F. MYERS, sales manager, Safety Head Div.



**UNITED MFG. & SERVICE CO.****Booth 209**

**FEATURED PRODUCT**—"Twin-Blok" phenolic junction block, a specially designed wiring component developed for use with Unilelectric wiring systems. "Short-proof" splice protection for several leads, and two receptacles for standard attachment plug caps. Accommodates up to 12-gauge cords. Saves substantially on wiring assembly time, as well as assuring more efficient and durable connections. Additional leads with female connectors can be added if needed. Permits quick disconnection of leads to components that may require repair or replacement.

**OUR VIEW FOR '52—**

"We will be in an ideal position to increase production of wiring systems in 1952 to meet any civilian or military demand. Presently operating on a one shift basis, we have the trained supervisory help available to permit the addition of one or two shifts and double or triple our output volume almost overnight with its present plant and equipment."—**HALBERT W. HOARD**, president.

**SEALED UNIT PARTS CO.****Booth 408**

**FEATURED PARTS**—Strainer and dehydrator combinations for commercial freezers and medium temperature units.

(Other products include a complete line of replacement parts for sealed units.)

**OUR VIEW FOR '52—**

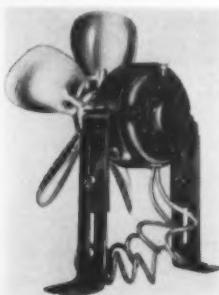
"There will be a terrific boom in the business of repairing of sealed units during the next few years. The next few years will show open units fading from the market entirely. New items for sealed units are being developed at a fantastic rate to keep up with this coming boom in the refrigeration repair business."—**FRANK R. LOWITZ**, vice president.

**GATES RUBBER CO.****Booths 409, 413**

**FEATURED PRODUCT**—V-belts in a wide variety of sizes and types, backed by a practical merchandising and selling program.

**OUR VIEW FOR '52—**

"To help jobbers and service engineers get their share of the fast-growing refrigeration belt market, we have developed the largest and most practical merchandising and selling program ever offered. Delivery? Because we are the world's largest manufacturer specializing in building V-belts, the refrigeration industry can depend upon prompt delivery of Gates belts to satisfy the ever-increasing demand."—**J. E. McCANDLESS**, manager, refrigeration belt sales.

**TRANSAIRE MFG. CO.****Booth 542**

**FEATURED PRODUCT**—"Transaire" MFB condenser fan and motor assembly for replacement on domestic and commercial hermetic units. Adjustable legs provide easy centering, are locked against swivel and require use of a screwdriver only for setting. Powered by totally enclosed shaded 4-pole motor. Rubber mountings and 18-inch leads are oil resistant. Capped oilers allow lubrication. One piece heavy-gauge aluminum fans in 7, 8, 9, and 10-inch sizes.

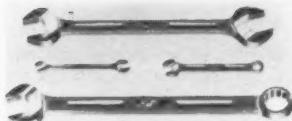
**OUR VIEW FOR '52—**

"The age of many hermetic units, plus a great number of obsolete models now in service, offers a rapidly expanding market for condenser fan replacement. The "Transaire" assembly, with its adjustable bracket, is designed to replace 95% of all existing condenser fans. 20,000 applications are the proof of Transaire's acceptance, and a ready supply through well stocked distributors throughout the country assure record sales for 1952."—**JOSEPH H. PREVITY**.

## TOOLS, SHOP EQUIPMENT

**BONNEY FORGE & TOOL WORKS**  
Booth 206

**FEATURED PRODUCT**—Newly designed, handsome, and streamlined open end and combination wrenches in a full range of sizes up to 1-inch openings headline this display of the complete Bonney line of refrigeration tools.



### OUR VIEW FOR '52—

"Although prospects for 1952 in the way of material restrictions and allocations are far from encouraging, the essentiality of hand tools for the refrigeration industry is recognized, and Bonney will make every effort to see that demands are satisfied. Bonney's policy will continue to be that which has led to its universal acceptance today—production of hand tools of the highest quality possible and constant development of new products to meet the requirements of the industry."—F. S. DURHAM, Jr., vice president and secretary.

**AIRSERCO MFG. CO.**  
Booth 405

**FEATURED PRODUCT**—Of special interest in Airserco's exhibit will be an electronic tracer which represents "a new scientific approach to refrigeration service, opening new fields in testing and maintenance of equipment where vibration is an important factor in checking performance". Also

shown will be the company's "Start-O-Metic" combination 110/220 voltmeter and a new kit-size valve analyzer, which is said to take the "guesswork" out of adjusting and checking thermostatic controls, suction line controls, and automatic and thermostatic expansion valves.

## SEE THE FREEZ-RITE

**GF-1051**

FROZEN FOOD  
SALES CABINET



**BOOTH 601**

7th All Industry  
Refrigeration and Air  
Conditioning Exposition  
Nov. 5, 6, 7, 8 in Chicago

The GF-1051 features a Thermopane glass front which creates a larger and more effective display area.

A roomy 10 cubic foot cabinet. Has rite angle mirror, fluorescent lighting, polished aluminum eyelevel price panel.

Four refrigerated divider plates maintain sub-zero temperatures. Snap-on defrosters give instant defrosting.

Write for Free Literature

**BAILEY & PERKINS CO.**

UTICA, MICHIGAN

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**INSTALL COMPLETE**

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Chicago phone: CORNELIA 7-4140  
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Name \_\_\_\_\_

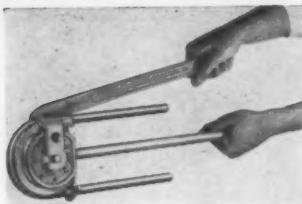
Address \_\_\_\_\_

City \_\_\_\_\_ Zone \_\_\_\_\_ State \_\_\_\_\_

Circle No. 59 on Reader Service Card for more information

**IMPERIAL BRASS MFG. CO.**

Booths 412, 416, 420

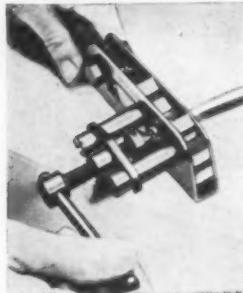


**FEATURED PRODUCT**—New 2-in-1 tube bender with dual size shoe and mandrel for bending either  $\frac{1}{2}$  or  $\frac{5}{8}$ -inch o.d. tubing without changing any parts. Can be slipped over tubing at exact point needed, and will make neat accurate bends to any angle up to 180 degrees. Mandrel calibrated to show degree position. Exceptional ease of operation.

(Other products include tube cutters, flaring tools, driers and filters, valves, charging and testing units, and liquid indicators.)

**OUR VIEW FOR '52—**

"With defense requirements for copper and brass rising steadily, and with an already critical copper supply situation further clouded by recent strikes at the mines and at some of the mills, it is apparent that products such as valves, driers, and fittings are likely to be in short supply for the foreseeable future. On the other hand, the outlook for tubing tools for essential work appears to be relatively favorable for the first six months of 1952."—C. H. BENSON, vice president.

**PENN BRASS & COPPER, INC.**

**FEATURED PRODUCT**—In anticipation of the widespread shortage of quality aluminum and copper tubing, Penn Brass & Copper Co. is featuring the famous Papco tube tools for vital tube conservation in 1952. R. K. Wilks, sales manager, is having company representatives across the na-

tion stress the merits and exclusive features of Papco flaring and cutting tools for preventing tubing waste. This new plan helps them to show their customers how to stretch tubing allotments with Papco tube—saving tools, which are scheduled for prompt delivery.

## Serving America's Finest Food Stores!

There's an interesting story for dealers in "Bally MEANS BIG BUSINESS". Copies available.



COLDISPLAY 51'  
All Purpose Case

...ONE OF 62 DIFFERENT  
BALLY MODELS and SIZES

# Bally

REFRIGERATED DISPLAY CASES

Bally Case and Cooler Co., Bally, Pa.

Circle No. 60 on Reader Service Card for more information

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**Low in Cost—but  
High in Operating Efficiency!**  
**Pritchard Series "SR"**  
**Quality COOLING TOWERS**



Featuring a low initial cost and greater efficiency, Pritchard Series "SR" Cooling Towers are ideal for air conditioning and refrigeration installations requiring from 3 to 35 tons capacity. Highest quality materials and better design assure longer life for these packaged units. Constructed of Redwood with steel pipe distribution system for trouble-free performance. "Slip-fit" design gives easy access to tower. Materials pre-fabricated before shipping. Investigate this low cost tower today if you're looking for higher operating efficiency in a small capacity tower.



Write for Bulletin No. 5.9.082  
TODAY!

Cooling Towers  
Specialized  
Heat Exchangers  
Gas & Air Treating

**J. F. Pritchard & Co.**

EQUIPMENT DIVISION

Dept. No. 205 908 Grand Ave. Kansas City 6, Mo.

District Offices: CHICAGO • HOUSTON • NEW YORK • PITTSBURGH  
TULSA • ST. LOUIS • Representatives in Principal Cities from Coast to Coast

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NOVEMBER, 1951 • COMMERCIAL REFRIGERATION

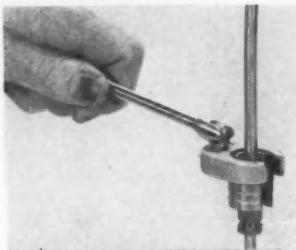
## SIMPSON ELECTRIC CO.



**FEATURED PRODUCT**—Model 890 Volt-Amp Wattmeter. Ruggedly constructed for full load continuous operation. First tester of its size to give volt-ampere-wattage readings in one compact instrument. Embraces two ranges each of voltage and current, covering practically all types and makes of appliances. Easy to use. Can be used as individual voltmeter or ammeter, due to widely separated binding posts. Molded bakelite case with easily read numerals recessed in panel.

**OUR VIEW FOR '52**—"We at Simpson are very optimistic over the prospects for 1952. While we are actively engaged in producing instruments for the government at this time, we feel that our expansion program, and the adding of approximately 30,000 sq. ft. at our new plant in Aurora will help to insure an even flow of electrical indicating instruments. Our promotional activity for '52 will be directed at a civilian economy based on our plants capacity."—M. O. BUEHRING, sales manager.

## TUBING APPLIANCE CO.



**FEATURED PRODUCT**—Open end ratchet wrench in two styles—socket type and crowfoot type. Socket type consists of a head with different sockets which may be inserted for application to various size nuts. Crowfoot type is built to accommodate only one size nut. Adaptable to almost all wrenching jobs. Flexible handle and ratcheting arc as small as 5 degrees allow use from almost any position.



**OUR VIEW FOR '52**—"We expect to produce and sell in 1952 twice as many open and ratchet wrenches as we will sell in 1951. The unusual design of these wrenches plus their widespread application

in every industry, makes us very optimistic about the future of these tools."—H. L. FISH, vice president.

## LINDE AIR PRODUCTS CO.

Booth 459

**FEATURED PRODUCT**—Oxy-acetylene welding and cutting equipment most frequently used in the refrigeration and air conditioning business. Simplified construction, maintenance, and repair, is featured. Equipment will include "Purox" and "Prest-O-

"Weld" welding and cutting apparatus and "Prest-O-Lite" equipment for soldering and brazing.

(Other products include a halide leak detector and cylinders for refrigerant gases in all popular sizes and styles.)

## HOLSCLAU BROTHERS, INC.

Booth 406



**FEATURED PRODUCT**—New "Handy Jr." tube bender, a one-piece combination bender for  $\frac{1}{8}$ ,  $\frac{1}{4}$ ,  $\frac{3}{8}$ , and  $\frac{1}{2}$ -inch o.d. tubing. Light and compact. Will bend four sizes of tubing yet is in price range of single size bender.

**OUR VIEW FOR '52**—"The market potential for this tube bender would seem unlimited. Wherever these sizes of tubing are used, the tool is needed. Unless we have more material restrictions, this tool will be available the first part of 1952. Our standard and heavy duty line of tube benders for larger sizes of tubing is presently in stock for immediate shipment."—BILL MILLER, sales manager.

## SERVICE MATERIALS AND SUPPLIES

### McINTIRE CONNECTOR CO.

Booths 439, 443

**FEATURED PRODUCT**—Refined and improved "DFN" moisture control equipment demonstrated by an educational display showing what happens inside a refrigeration system in actual operation.

**OUR VIEW FOR '52**—"Our products will be available to the full extent of CMP raw material allotments. The market for our goods has been expanding and we see no reason for it to contract. That does not mean we will spare the horses in sales effort or advertising. We are going after every order we can handle."—L. S. DUNN, president.

**HANDY & HARMAN**

**FEATURED PRODUCT**—"Easy-Flo" and "Sil-Fos" low temperature silver brazing alloys which produce high strength joints, faster and at lower cost. Reach brazing temperature fast, penetrate to every part of joint, diffuse into metal surfaces and actually alloy with them, require only thin films to make strongest joints, and leave little or no alloy outside a joint, thus minimizing finishing.

**OUR VIEW FOR '52—**

"Our business prospects for 1952 primarily depend on international events and our government policies. If we continue to operate in the present dual economy there should be ample supplies of our products available for refrigeration and other civilian uses. The combination of producing for defense and non-defense work should make 1952 a good business year."—M. W. TOWNSEND, sales manager.

**VIRGINIA SMELTING CO.**

Booth 233

**FEATURED PRODUCT**—A demonstration of the insulating properties of "Presstite" insulation tape for preventing condensate drip from suction lines, circulating cold water pipes, valves, and fittings.

(Other products include sulphur dioxide, methyl chloride, and Freon refrigerants.)

**DAVISON CHEMICAL CORP.**

Booths 214, 218

**FEATURED PRODUCT**—PA-100 refrigeration grade silica gel, effectiveness of which has been increased by constant research and development and by rigid production control. Being completely inert, this material cannot cause corrosion, and there is no danger of its dusting, caking, channelling refrigerants, or causing any other undesirable reaction.

**OUR VIEW FOR '52**—"This new and improved product will be readily available during 1952 and there is every reason to believe that it will maintain its leadership and market acceptance."—NORMAN E. HATHAWAY, sales manager, general chemical div.

**Refrigeration Industry Report:****PLASTI-KOTE****SELF-SPRAY  
ENAMELS****1st IN SALES  
COAST TO COAST**

- Paint and Pressure In One Container
- No Brushes, No Mixing



Plasti-Kote Self-Spray Enamel and Lacquer, the only nationally-advertised paint in self-spray cans, has become the "standard of the industry". Hundreds of profitable uses for the refrigeration industry.

**SEE SELF-SPRAY ENAMELS & LACQUER  
DEMONSTRATED BOOTH 607**

For Catalog Sheets and Color Card See Your Dist. or Write:

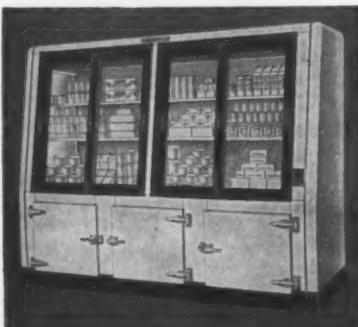
**PLASTI-KOTE, Inc.**

425 LAKESIDE AVE. • CLEVELAND 13, OHIO

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**Pinnacle  
REFRIGERATORS**

More and more dealers are switching to the complete Pinnacle Line . . . establishing Greater Sales Records . . . gaining satisfied, repeat customers. HERE'S GREATER VOLUME AND PROFIT TO YOU!



\*BUTCHER CASES \*DELICATESSEN CASES \*REACH-IN BOXES  
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Write for FREE FOLDERS A few exclusive Pinnacle Territory Franchises are still available. Wire or of complete line. write today for full information.

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NOVEMBER, 1951 • COMMERCIAL REFRIGERATION

## PLASTI-KOTE, INC.

Booth 514-A



## HIGHSIDE CHEMICALS CO.

Booth 411



**FEATURED PRODUCT**—A new self-spray lacquer, available in both "appliance white" and black, will be introduced by Plasti-Kote, Inc. at the Show. Paint and pressure are all in one container. To apply the lacquer, the operator merely presses the trigger on the top of the container. According to the manufacturer, the new self-spray lacquer will dry in 10 minutes. The company also will display its complete line of paints and self-spray enamels.

**OUR VIEW FOR '52**—"Plasti-Kote has been pleased with the refrigeration industry's reception to our self-spray enamels and allied products. We feel that Self-Spray enamels have opened a new and profitable market for the refrigeration industry."—H. D. FINE, president.



**OUR VIEW FOR '52**—"Our products are used by the refrigeration service engineer in both new and old systems in trouble-prevention and maintenance work. Present indications are that the country will be engaged in a heavy defense program during 1952. This means that although the usual buyer of refrigeration equipment will be extremely curtailed in his ability to buy new equipment, he will require considerably more service maintenance on the old. That is why we are confident there will be an excellent market potential for our products. We will serve the trade promptly without sacrificing quality."—LAWRENCE V. GARDNER, general manager.

## LAKE CHEMICAL CO.

Booth 534

**FEATURED PRODUCT**—"La-Co" non-acid soldering flux paste. No surface cleaning necessary. All-purpose flux instantly dissolves oxides of metals and prepares a free and clean surface for a firm union of solder and metal. Fluxes right through oily surfaces. Eliminates unnecessary clean-

ing. Will sweat all types of metals, making a perfect joint. Ideal for use on copper, brass, lead, galvanized iron, tin, steel, cast iron, zinc, etc.

(Other products include "Flux-Stik" soldering flux and "Pipetite-Stik" pipe joint compound both in stick form.)

## L. H. GILMER CO.

Booth 320

**FEATURED PRODUCT**—Shock pad for checking vibration and vibration noise on household and light commercial equipment. Requires no cement for installation, is not affected by water, oil, or cleaning compounds,

does not compact or harden. Offered in packaged sets of four, in a standard size 2"x2"x $\frac{1}{4}$ ", and are packed in a counter display carton, 20 boxes to the carton.

## DRAVO OPENS NEW SHOP FACILITIES

Increasing number of air conditioning installations for commercial, institutional and industrial buildings throughout western Pennsylvania, has resulted in the opening of new shop facilities for this work by Dravo Corp.

The new facilities, formally opened

Sept. 19, are at 3901 Second Ave., Oakland.

With a total of 19,500 sq. ft. of floor area, the new shop will include fabricating and welding facilities for servicing and maintaining air conditioning and combustion systems.

The shop also will provide enlarged

manufacturing space for producing Dravo crane cab coolers, small air conditioning units used on cranes operating in the hot atmospheres of steel mills, foundries and chemical plants.

**BUY FROM YOUR  
REFRIGERATION WHOLESALER**

## SHOW-GOERS CAN SEE PRO FOOTBALL GAME

Arrangements have been made for exhibitors at the 7th All-Industry Show to attend the pro football game between the Cleveland Browns and the Chicago Cardinals on Sunday, November 4, the day before the show opens.

George Mills, show director, reports that a block of 400 seats has been set aside for exhibitors. The tickets are priced at \$4 each, and advance reservations were to be made direct with the Chicago Cardinal ticket office.

## FOGEL HAS CONTEST FOR SHOW VISITORS

To attract attention to its display at the All-Industry Show, Fogel Refrigerator Co. is offering a reward of \$100 to the person who is first to identify a mystery girl identified as "Miss Fogel Refrigerator—Booth 549."

The \$100 reward will be paid to the first person who approaches the mystery girl inside the exhibition area of the Navy Pier and correctly iden-

**A**PPROPRIATE ceremonies for opening the 7th All-Industry Show will be featured during a "Kickoff Breakfast" to be held in the Grand Ballroom of the Hotel Sherman, Chicago, at 9 a. m. on Monday, Nov. 5.

Invitations to the breakfast have been extended to all REMA members, all exhibitors, officers of co-operating trade associations, the trade press, NPA officials, and other guests.

Brief program following the breakfast will include an official welcome to Show exhibitors and visitors, highlights of interest in connection with the Show and official opening ceremonies. REMA officials promise the session will be over by about 10 a. m., so that those attending may go to other association meetings or take care of other pre>Show business.

The Show opens formally at 2 p. m. on Nov. 5.

tifies her with the words "You are Miss Fogel Refrigerator—Booth 549."

She will be within the exhibition area each day until discovered, and additional clues to her identity will be posted daily to aid Show-goers in locating her.

## PLOWFIELD NAMED BY TWO CASE COMPANIES

Cold Products Co., Philadelphia, manufacturer of vegetable display, ice cream and frozen food cabinets, have announced the appointment of Bill Plowfield of Philadelphia as eastern representative.

Plowfield also has been appointed eastern district manager for Minneapolis Show Case & Fixture Co., New Richmond, Wis.

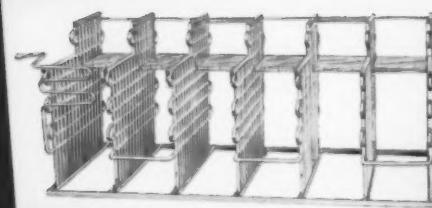
## MITCHELL SETS UP COOLING DIVISION

The establishment of separate divisions responsible for the various manufacturing activities of Mitchell Mfg. Co. was announced recently by B. A. Mitchell, company president.

The new plan creates four main divisions: air conditioning, portable lamps, commercial and industrial fluorescent lighting, and radio and television.

In charge of the air conditioning division, which manufactures 1 hp,  $\frac{3}{4}$  hp,  $\frac{1}{2}$  hp and  $\frac{1}{3}$  hp window type room air conditioners, is E. A. Tracey, company vice-president.

## IDEAL *Speed-Freeze* Products with the famous Arctic Fin Evaporator



write...

**IDEAL COOLER CORPORATION**

2953 EASTON AVE., ST. LOUIS 6, MO.

**NEW!**

SELF-MEASURING  
SPILL-PROOF

**FLO**  
DISPENSER!

Accurate  
Easy to Use



**NOW**—the new graduated FLO bottle enables you to add the exact amount of this liquid dehydrant to the system without waste or spilling.

Accurate graduations printed in reverse position on the side of the plastic, break-proof container tell at a glance how much you add. A slight pressure on the side of the bottle starts the discharge instantly into the system. Release of pressure stops the flow at the correct mark. It's simple. It's easy. It's accurate.

FLO destroys moisture upon contact as it travels through the system. Keeps the refrigerant dry and at top efficiency.

*Fill it!—Don't Spill it!*

**AT YOUR JOBBER**

**ALLIN MANUFACTURING CO.**

1153 West Grand Avenue, Chicago 22, Illinois

## Compressor and Compressor Unit Shipments, 1949 and 1950

(Value figures in thousands of dollars)

Product	1950		1949		Number of compressors produced and incorporated into other equipment at the same establishment	
	Shipments of complete units		Number of compressor bodies manufactured	Shipments of complete units		
	Number	Value		Number		
<b>COMPRESSORS AND COMPRESSOR UNITS, TOTAL . . . . .</b>	954,368	\$46,977	2,183,389	604,431	\$29,929	814,825
<b>Refrigerants except ammonia, total . . . . .</b>	951,716	40,221	2,180,480	602,191	24,309	814,754
% hp. and under (except units for household refrigerators) . . . . .	899,726	26,013	1,978,953	570,830	15,240	723,697
1 hp. . . . .	23,828	1,328	74,841	14,733	835	27,731
1 1/2 hp. . . . .	5,466	417	21,735	2,092	179	11,331
2 hp. . . . .	5,143	437	22,950	4,069	350	11,041
3 hp. . . . .	4,794	632	27,585	2,039	314	14,897
5 hp. . . . .	4,058	935	33,207	2,849	591	20,137
7 1/2 hp. . . . .	1,388	431	8,613	777	341	2,594
10 hp. . . . .	1,272	690	3,317	962	481	1,244
15 hp. . . . .	1,232	1,005	2,561	1,053	906	681
20 hp. . . . .	520	656	976	484	534	397
25 hp. . . . .	1,574	1,759	1,966	705	903	448
30 hp. . . . .	395	553		268	425	
40 hp. . . . .	945	1,742		480	956	
50 hp. . . . .	562	1,137	3,776	438	903	
60 hp. . . . .	315	701		164	397	
75 hp. . . . .	298	909		152	514	
100 hp. and over . . . . .	200	876		96	440	
<b>Ammonia refrigerants, total . . . . .</b>	<b>2,652</b>	<b>6,756</b>	<b>2,909</b>	<b>2,240</b>	<b>5,620</b>	<b>71</b>
5 hp. and under . . . . .	179	82		120	60	
7 1/2 hp. . . . .	103	76		98	61	
10 hp. . . . .	179	151		129	123	
15 hp. . . . .	244	313		236	257	
20 hp. . . . .	307	408		240	309	
25 hp. . . . .	223	374		278	433	
30 hp. . . . .	287	578		231	482	
40 hp. . . . .	226	514	2,909	214	479	
50 hp. . . . .	239	686		140	419	
60 hp. . . . .	175	566		143	467	
75 hp. . . . .	137	573		126	424	
100 hp. . . . .	165	766		119	532	
101 to 200 hp. . . . .	157	1,148		122	820	
201 to 300 hp. . . . .	16	223		20	279	
301 to 500 hp. . . . .				15	271	
500 hp. and over . . . . .	15	298		9	204	

### DAIRY EQUIPMENT MAKERS MOST ON REPAIR PARTS

The Dairy Equipment Manufacturers Industry advisory committee reported to NPA officials at a recent meeting that a very small percentage of current production is new equipment, and that some 35% is for repairs and minor capital additions.

Only 10% of the dollar volume in the third quarter was for defense contracts, they reported. The peak of such production is not expected before next February.

Members declared costly tests on

substitutes for nickel-bearing stainless steel have proved unsuccessful. Also, they reported that difficulty in obtaining rubber gaskets of suitable quality was responsible for the industry's biggest backlog of orders for spare parts.

### DAVISON MAN NAMED TO NPA CHEMICALS POST

The National Production Authority, U. S. Department of Commerce, has announced the appointment of George M. Hebbard of Bay Ridge,

Md., as Deputy Chief of the Inorganic and Agricultural Chemicals Branch of the Chemicals Division.

Hebbard is on leave as vice president of operations and engineering of the Davison Chemical Corp.

He will assist Frederic Arden, chief of the branch, which includes the following sections: Sulfur, inorganic acids, metallic salts, compressed gases, alkalies and agricultural chemicals.

**BUY FROM YOUR  
REFRIGERATION WHOLESALER**

## NEW "MERCHANTS" PLANT FREEZES 50 TONS DAILY

Some 100,000 pounds a day of poultry freezing capacity, and low temperature storage for 21,000,000 pounds of foods will be provided by a specially designed ammonia refrigeration system in the new Merchants Refrigerating Co. plant outside Minneapolis, Minn.

The ultra-modern new plant—eighth commercial refrigeration warehouse to be opened by the Merchants company in the eastern and central United States—is now under construction and is scheduled for operation in October.

The system will include nine heavy duty reciprocating compressors, and will supply both chilled brine for the storage areas and direct expansion ammonia cooling for the blast freezing tunnels. The temperature range will be from -30 F in the freezing tunnels to -10 F in more than a million cubic feet of freezer storage to 35 F in the remainder of the storage space.

Six compressors will be assigned to the low stage of the two-stage system. Two of these will normally han-

dle the blast freezing load, operating at a suction temperature of -40 F, and the other four will be used to chill brine for the storage areas, using shell and tube coolers and operating at a suction temperature of -30 F.

However, all six compressors will discharge into the same intercooler and the system has been interconnected so that any of the low stage compressors may be used for either the brine or the blast freezing.

The two blast freezer compressors will handle a total refrigeration load of 72 tons at the extreme low temperature required, and the four brine cooling units will handle 206 tons.

The same brine will be used for both the 35 F and the -10 F storage areas, with the difference in temperature maintained by different rates of flow.

Three compressors will be used on the high stage with two in operation and the third as a standby unit. Each of these will provide up to 140 tons of capacity. Carrier equipment is used.

### BUY FROM YOUR REFRIGERATION WHOLESALER

## JOHNSON SERVICE OPENS OFFICE IN SOUTH BEND

Johnson Service Co., Milwaukee, has announced the opening of a new branch office in South Bend, Ind. Andrew J. Hunter, formerly of Johnson's Chicago branch, has been named sales engineer in charge. The new branch will serve users of the company's automatic temperature control systems in northern Indiana.

## GLASS FIRM TO SUPPLY INSULATION "SPECIALS"

The Ohio Plate Glass Co. is adding fabrication and distribution facilities for Fiberglas Aerocor insulation and Fiberglas PF (Pre-Formed) insulation.

The company, whose general offices are in Toledo, operates branches in Ft. Wayne, Detroit, Flint and Dayton. It is a wholesale distributor of flat glass, mirrors and floor coverings.

The firm will supply special sizes, shapes and odd lots of Fiberglas insulations to manufacturers for a wide range of uses.

## NOW A *No Leak* GAGE-TITE Gauge Glass

This E. F. Vilter Gauge Glass Model O on a compressor shows ACCURATELY how full the crank case is. Designed and assembled with the utmost care and skill, each unit is tested to insure you years of trouble-free service.



- Glass sealed to bellows with silver bearing solder.
- Soft copper tubes silver soldered into heads.

### Shows Actual OIL LEVEL

- Bellows absorb expansion and strain on glass.
- Plugs at ends permit cleaning of glass, if necessary.
- Connecting tubes sealed to keep out dirt and moisture.

Model O



### LIQUID LEVEL

Model L Gauge Glass on a compressor unit enables you to tell IMMEDIATELY and ACCURATELY how full the receiver is. Important on units for removed from service facilities or where the temperature of the material being cooled must be carefully watched.

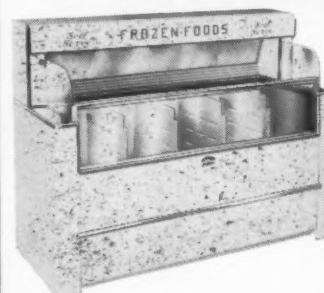
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## THE NATIONAL MERCHANDISER

"THE CABINET WITH NATIONWIDE REPUTATION"



Model SDG-15—15 cu. ft. capacity, 69" long. Also available 10 cu. ft. 56" long; 21 cu. ft. 104" long.

A SURE WAY  
TO BETTER PROFITS

FOR USERS

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DEALERS

- Greater Visibility
- Maintains Constant Low Temperatures

AT LAST!

### A Large Capacity Case In Compact Design

- Cabinet: Heavy gauge steel. Deluxe Finish
- Insulation: 4" low-temperature approved, vapor sealed
- Front Glass: 3 Glass "Thermopane"
- Patented Removable Defrosters
- Unit: Sealed Tecumseh 110 volts—"Freon 22"

### PROMPT DELIVERY

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National Market Equipment Co.  
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## NAVY'S NEW JET LAB HAS YORK EQUIPMENT

To insure that Navy fighting planes will be able to obtain flight ceilings higher than those of any enemy aircrafts, the Navy's Bureau of Yards and Docks is speeding the completion of a new aeronautical turbine laboratory at Trenton, N. J.

Specifically designed to test Navy jet engines and incorporating latest design techniques by York Corp., the aeronautical turbine lab will consist primarily of five testing chambers composed of two altitude "strato-chambers," two test cells and one turbo prop cell.

A contract of approximately \$1,200,000 for the refrigeration and air testing rigs was awarded in December, 1949, to Mehring and Hanson Co. of Arlington, Va., using York refrigeration equipment.

The turbo compressor refrigeration systems will be used to cool air for the engines under test. The air will be cooled in three stages with final stage capable of either heating or cooling the air passed into the test chambers.

The first stage is known as the "A"

rigs, and consists of three chambers, each with a bank of cooling tower water coils and Freon-12 recirculation coils. This stage will cool the air to about 40 F by the use of cooling tower water and three 1,600 hp York turbo compressor refrigeration systems. This air will then enter the second stage called the "B" rigs.

Each "B" rig will have a set of Freon-12 recirculation coils which will cool the air to minus 23 F. The refrigeration for this stage consists of three 600 hp York systems. From the "B" rigs, the minus 23 F air will go to the third stage, consisting of three "C" rigs or two "D" rigs.

The "C" rigs will cool or heat air to any desired temperature between 190 F and minus 67 F. Cooling or heating will be done by brine (trichloroethylene) coils. The refrigeration for these is three 200 hp York turbo compressor systems.

The "D" rigs will heat air to any desired temperature between minus 23 F and 190 F. Heating will be done by brine (ethylene-glycol) coils.

The low stage evaporator, a shell and tube brine cooler, will furnish cold brine for the "C" rigs.

The intermediate stage evaporator will be a flash cooler for the "B" rigs operating at an intermediate load on the second stage compressor.

The high stage evaporator will be a flash cooler for the "A" rigs operating as an intermediate load on the high stage compressor.

## NEW MANUFACTURERS' PRICING METHOD SET

New manufacturers who cannot determine ceiling prices under the machinery ceiling price regulation (CPR 30) because they were not in business before Jan. 1, 1951, may now apply to OPS for approval of proposed ceilings.

Application may be made for either specific ceilings or a price determining method. Such applications should be made on OPS Public Form 90 or 91 and sent by registered mail to OPS in Washington.

Sellers may quote or charge the proposed ceiling before approval by OPS but may not accept payment for more than 75% of the ceiling price until after it has been approved.

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## FLUX-Stik

NON ACID  
SOLDERING FLUX  
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## PIPETITE-Stik

PIPE JOINT COMPOUND

IN STICK FORM

Make quick, clean and permanent joint connections with new easy-to-use PIPETITE-Stik pipe joint compound. A perfect leak-proof seal for all types of liquids and gas—for all types of metal and plastic threads—for pressures up to 2100 lbs. p.s.i. PIPETITE-Stik is non-toxic. Contains no lead or injurious ingredients. Its non-drying action lubricates and completely seals pipe

joint threads, nuts, bolts, gaskets, etc. Just rub 3 or 4 strokes across the male end pipe threads and assemble. Send for free sample today and try it on your sealing problems.



NO MESS  
NO BRUSH  
NO WASTE

LAKE CHEMICAL CO.

3052 W. CARROLL AVE. • CHICAGO 12, ILL.

# One Good Installation Deserves Another, Warehouse Management Believes

A TOTAL of 12,000 cubic feet of refrigerated storage space has recently been added to the facilities of the C. D. Kenny Division of Consolidated Grocers Corp., in Baltimore. Since many of the 2500 items handled by the division are frozen or perishable, the new addition will greatly increase the company's ability to serve the hundreds of restaurants, hotels,

grocers and institutions who are its customers. E. H. Bohnfink is general manager of the division.

The new Kenny warehouse and offices at 1300 S. Monroe St., Baltimore, opened this year, comprising 96,000 sq. ft. of floor space on one level. About four years previously, the company pioneered a special type of refrigerated warehouse that en-



Sub-zero temperature room of the Kenny warehouse. Forced-air cooling units serving this room are equipped with automatic defrosting. This photo and the one above were supplied by Armstrong Cork Co., Baltimore, who insulated the rooms.



Exterior view of the newly completed refrigerated storage rooms in the warehouse of the C. D. Kenny Co., Baltimore. The company is a major supplier of perishable foods to grocers, restaurants, hotels, hospitals and institutions in the area.

abled them to store, process and ship perishable food without ever taking it outside the scientifically-cooled chambers.

So successful was this original warehouse that the needs of C. D. Kenny required the present expansion in a comparatively short time. Oreole Refrigeration Co. of Baltimore, which designed and engineered the first refrigerated warehouse, was called in to work out this new project. Construction and building design were under the direction of Lucius White, well-known Baltimore architect.

The new warehouse is a three-in-one storage-freezing-shipping room 120 feet in length and 40 feet wide. It is divided into three individual chambers. A 20' x 40' storage room is maintained at 40 F temperature to permit perfect storage of dried fruits. The central unit houses ice cream and frozen foods at a -10 F level, occupying 80' x 40' of space, while the 20' x 40' shipping room adjacent to it is kept at a 32 F temperature level.

A refrigerated shipping room allows processing of refrigerated foods

Louis M. Kann, vice-president in charge of engineering at Oreole Refrigeration Co., Baltimore, designed the C. D. Kenny Division refrigerated warehouse.

Kann represents the company that pioneered the first refrigerated dispensing equipment for Birdseye in 1930. His own specialty is the design and engineering of low-temperature storage and processing rooms for both refrigeration and air-conditioning.

In designing the Kenny warehouse, Kann utilized as much of the former equipment as possible, thus greatly cutting down expenses. He has designed installations for the scientific storing and processing of bananas; for dust and humidity control in textile mills and many other specialized installations.

without exposing personnel to the extreme temperatures of the freezing chamber, as well as avoiding exposure of foods to above-freezing temperatures. The loading platform adjoins the shipping room, enabling Kenny to transfer frozen foods directly from the storage room to the shipping room to the trucks, without waste motion or waste of foodstuffs.

The entire refrigerated area is engineered to operate automatically. No engineer is required to maintain it.

Insulation is effected by an 8-inch sheet of cork, encasing the entire

structure, operating on a Freon system of cooling. Two 20 hp compressors, supported by two 5 hp units, provide automatic refrigeration at desired levels. One set of compressors is used as a stand-by unit in case the first one ceases operation.

The new Kenny warehouse was in complete operation just as the first heat wave hit the Baltimore area. Users of fresh and frozen foods and ice cream are now assured of a plentiful supply and superior service from the company's expanded facilities.

### ESTON PRODUCING NEW FIRE FIGHTING CHEMICAL

Chlorobromomethane, a powerfully effective fire extinguishing agent, is now being manufactured on a commercial scale by Eston Chemicals, Inc., Los Angeles.

The company says that large scale tests made by the Navy and Army Air Forces have proved the effectiveness of the material, particularly for fighting magnesium, incendiary and electrical fires. Its efficiency on a weight basis is said to be more than twice that of carbon tetrachloride.

### PATENT SUIT AGAINST SUPERFLOW DISMISSED

Ray Kromer, president of Superflow Mfg. Co., Cleveland, has announced that the patent lawsuit against Superflow instituted by Uni-flow Mfg. Co. was dismissed on Sept. 11 by Judge Jones in Federal Court. According to Kromer, the court ordered that the case "be dismissed, without prejudice, for want of prosecution, at plaintiff's costs."

### NEW PACKAGE DESIGN



A-P Controls Corp. has recently redesigned all its refrigeration unit packages to assure higher visibility on the wholesaler's shelf and to present a "family" appearance for quick and easy identification. The new package design was developed by Brooks Stevens, well-known industrial designer.

### BAILEY & PERKINS CO. MOVES TO UTICA, MICH.

Bailey & Perkins Co., manufacturer of frozen food display cabinets, has moved its manufacturing operations from Plymouth, Mich., to 44464 Van Dyke Ave., Utica, Mich.

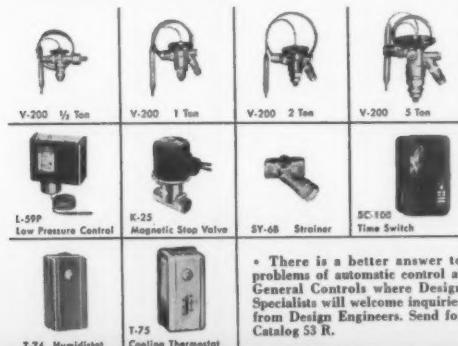
The new location more than triples the space formerly occupied by the company. New large open space on one floor eliminates many former handling problems, the company reports, and will permit better scheduling of manufacturing and an improved factor of quality control. Added acreage for expansion also is available at the new factory site.

### AIRTEMP DISPLAYS AT BANKERS CONVENTION

Airtemp Division of Chrysler Corp. displayed its 1951 air conditioning and heating products at the 77th annual American Bankers Association Convention held recently in Chicago. The display included a packaged air conditioner, residential year 'round air conditioner, electric dehumidifier, radial compressor unit and a conversion oil burner.

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Thermal Expansion Valves . . . V-200 Series. For high or low temperature applications suitable for Freon, Methyl Chloride or Sulphur Dioxide. Non-adjustable, adjustable and super-heat models available. External equalizer available on 5-ton models.



**GENERAL**  **CONTROLS**

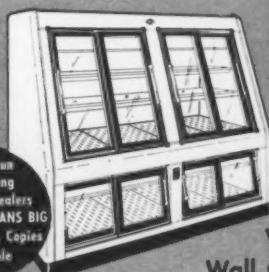
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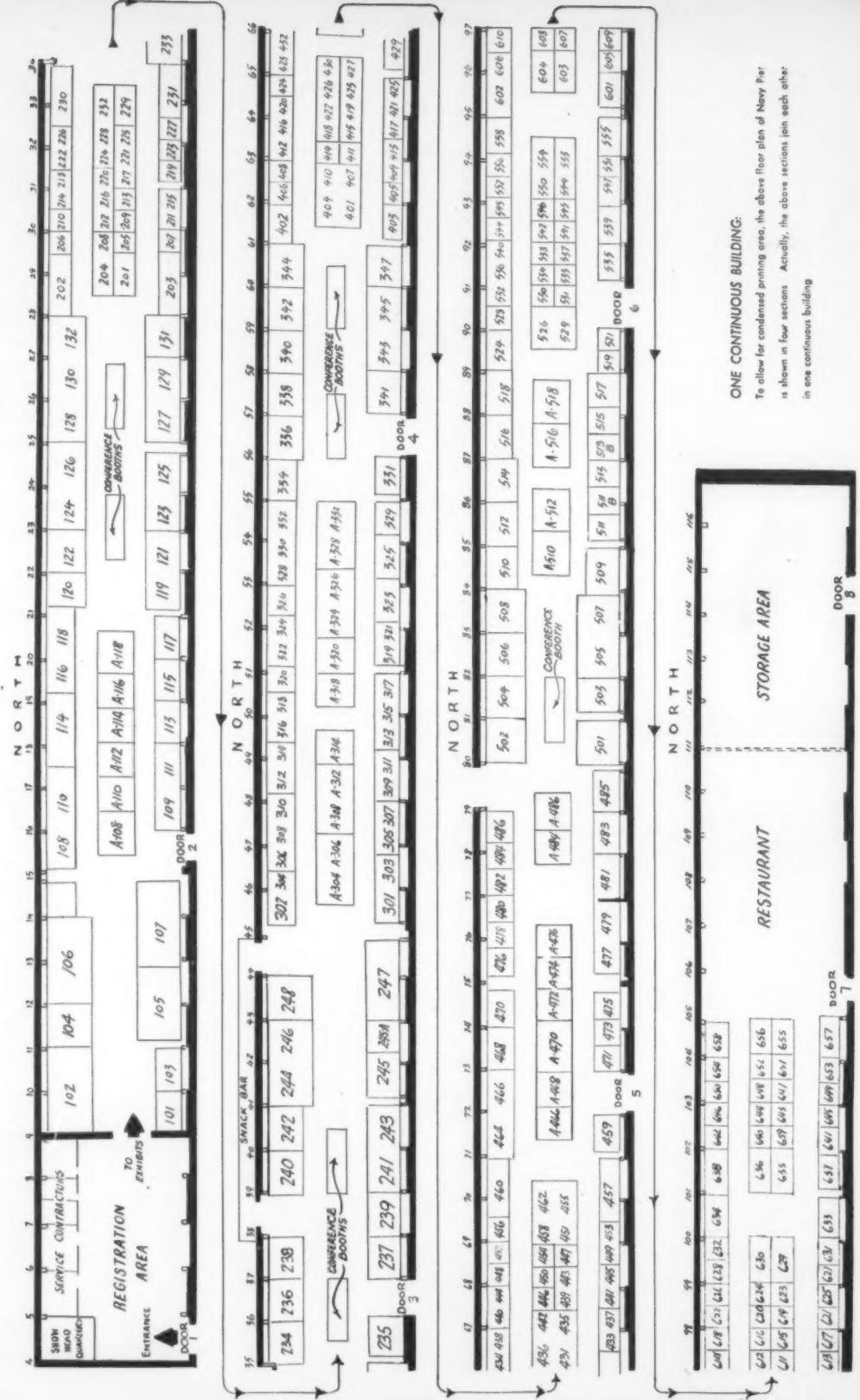
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BALLY MODELS and SIZES

**Bally**  
REFRIGERATED DISPLAY CASES  
Bally Case and Cooler Co., Bally, Pa.

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# How to Find Your Way Around the Show

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NOVEMBER, 1951 • COMMERCIAL REFRIGERATION

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## **REWA**

Show Activities



November 4-6  
Sheraton Hotel

## **RACCA**

Show Activities



November 3-4  
Knickerbocker Hotel

## **NCRSA**

Show Activities



November 5-6  
La Salle Hotel

## **RSES**

Show Activities



November 3-6  
Morrison Hotel

## **Specially Invited "Observers" to Sit in on Wholesalers' Directors Meeting**

ACTIVITIES of Refrigeration Equipment Wholesalers Association in connection with this year's All-Industry Show are confined to a board of directors meeting on Sunday, Nov. 4, the 16th annual REWA meeting on Monday, Nov. 5, and a cocktail party and banquet on Tuesday, Nov. 6.

All REWA activities will be held at the Sheraton Hotel, the association's headquarters during the All-Industry Show.

Morning session of the REWA annual meeting, scheduled to open at 10 a. m., will include reports of the treasurer, finance committee, trade relations committee, and manufac-

## **Sixth Annual Contractor Convention Will Spotlight Problems of Current Interest**

TOPICS of prime interest to refrigeration contractor organizations under present-day conditions will occupy the attention of the Refrigeration and Air Conditioning Contractor Association's sixth annual convention, to be held Nov. 3 and 4 in Hotel Knickerbocker, Chicago.

Convention sessions of RACCA

will get under way at 9 a. m. on Saturday, Nov. 3, with an address of welcome by Harry L. Bransky, president of the Chicago RACCA organization. Following this, RACCA president Ted Reina will present his annual report. George T. Howe, program chairman, will outline the activities and entertainment planned, and will

## **"Make More of Tomorrow By Planning Today" Is Commercial Sales Theme**

THE fifth annual convention of National Commercial Refrigerator Sales Association will be held Monday and Tuesday, Nov. 5 and 6, at the La Salle Hotel, Chicago, NCRSA headquarters during the All-Industry Show.

All general meetings will be held in the hotel's Century Room, on the

19th floor. The annual dinner, scheduled for 7 p. m. Monday, Nov. 5, will be held in the Grand Ballroom.

Preceding the general meetings, NCRSA's board of directors will hold their annual dinner meeting at 6:30 p. m. Sunday, Nov. 4, in Parlors E and F at the La Salle.

At the first general meeting, which

## **Service Engineers' Sessions Planned to Allow Plenty of Time to Attend Show**

A VARIED program of technical papers and discussions will feature the 14th annual convention of the Refrigeration Service Engineers Society, to be held Nov. 3 to 6 at the Morrison Hotel, Chicago. All meetings, and the annual RSES banquet, will be held in the hotel's Terrace Casino.

Leading off the sessions at 1 p.m. on Saturday, Nov. 3, will be the RSES general business session. This session will cover welcoming addresses by the presidents of REMA, REWA, and RACCA, reports of international officers and committee chairmen, and the appointment of convention committees.

turers relations committee.

A highlight of the morning session will be the awarding of plaques to 15-year members of REWA. Election of directors, following the nominating committee's report, and the report of REWA president J. P. Glass will close the morning program.

Following luncheon, the afternoon session starting at 2:30 p. m. will lead off with an address by A. B. Schellenberg on "Problems Confronting Wholesalers Today". A report on REWA's Washington activities next

will be presented by E. C. Marsden, after which speakers from NPA will outline the defense production picture as it affects the activities of the parts and supplies wholesaler. Open discussion will follow these talks, with Marsden acting as moderator. The meeting will then adjourn.

The REWA cocktail party and banquet will be held at 7:30 p. m. on Nov. 6. Cocktails will be served in the Boulevard Room and dinner in the Grand Ballroom.

At Sunday's board of directors

meeting, specially invited observers will include all past presidents of REWA and a delegate from each of the association's 11 regions. This plan, a departure from past practice, has been proposed as a means of giving members generally a better understanding of the work conducted by directors in operating the association.

REWA's program has been mapped to allow members a maximum amount of time at the Show, the only conflict with exposition hours being the afternoon session on Nov. 4.

announce convention committees.

Speakers at the morning session will include:

C. S. Stackpole, vice president of Chrysler Corp., Airtemp Div., who will discuss "Trade Relations Between Manufacturers and Contractors"; Jerry Mitchell, of the U. S. Department of Labor, who will outline "Wage and Hour Controls"; and Michael J. Howlett, regional director of the Office of Price Stabilization, Chicago, whose subject will be "Price Controls."

A luncheon session will follow at approximately 12:30 p. m., and efforts are being made to obtain a representative from some branch of the federal government as speaker for the affair.

The afternoon RACCA session, beginning at 2:30 p. m., will include talks by both manufacturer and contractor representatives on subjects high in current contractor interest.

Robert L. Tyler, president of Tyler Refrigerator Co., will discuss "Future Trend and Styling of Refrigeration

Fixtures"; H. J. Prebenson, of Air Comfort Corp., Chicago, will present the "Trend in Air Conditioning Construction"; Albert G. Weil, of Refrigeration Maintenance Corp., Chicago, will outline "A Method of Estimating Air Conditioning Proposals"; and R. E. Manns, of Wilmington, Calif., a RACCA member, will present "Our Ideas on the Control of Inspection of Manufactured Products Relating to Our Industry, to Assure Good Equipment in the Field."

*Continued on page 118*

will begin at 10 a. m. Nov. 5, a report on "The Activities of the Association" will be presented by Marie H. Lawton, executive secretary. This will be followed by the annual address of NCRSA president I. Rosenberg, Jr., of Refrigeration Equipment Co., Pittsburgh.

"The Business Outlook" will be discussed by George W. Cloos, economist of the Federal Reserve Bank, Chicago. R. L. Tyler, president of Tyler Fixture Corp., will then discuss "What's Ahead for Our Industry",

and H. Ferris White, Jr., of Booz, Allen & Hamilton, Chicago, will speak on "Time Out for Self Appraisal".

At the afternoon session, which begins at 2 p. m., John Poth, president of A. C. Wicke Mfg. Co., New York City, will discuss "What Progressive Steps Can We Take in the Year Ahead?"; J. S. Lipack, executive vice president of Super-Cold New York Corp., will speak on "Problems of Management—How the Distributor Can Solve Them"; W. J. Stelpflug, vice president of Hussmann Refrig-

erator Co., will outline "What is an Ideal Distributor?"; and James F. Haboush, editor of *Food Mart News*, will describe "How Modernized Self-Service Stores Increase Sales".

At the 5th annual dinner at 7 p. m. Nov. 5 in the Grand Ballroom of the La Salle, entertainment will include humorous magician Frank Shepard and pianist-accordionist Lillian Keller. No formal talks are scheduled.

Featuring the general meeting at 10 a. m. on Tuesday morning, Nov.

*Continued on page 118*

The only technical talk scheduled for this session is by John H. Spence, service manager of Hussmann Refrigeration, on "Recent Developments in Open Self-Service Refrigerated Fixtures, and Their Problems."

Registration of delegates will precede the opening session, and the evening has been left open to allow visitors to see the sights of Chicago.

Technical sessions on the three following days will open with the popular "Information Please", in which service problems submitted by

those present are answered by a panel of experts.

First speaker at the Sunday, Nov. 4, morning meeting, J. Cecil Sharp, engineer for Carrier Corp., will report on "An Analysis of Service Calls", results of a survey recently completed. "Present Opportunities for the Service Engineer in Industrial Low Temperature Refrigeration" will be outlined by Charles C. E. Harris, of Harris Refrigeration Co.

At the Sunday afternoon session, speakers and topics will include

"Servicing Ice Cube Makers", a movie and discussion by W. G. MacBride, commercial service manager of York Corp.; "Invisible Enemies of the Service Engineer", by Dr. W. O. Walker, director of industrial chemical research at the University of Miami; "Refrigeration Equipment and Application in Use in the Air Force", by William T. Smith, directorate of installations, U. S. Air Force, and a discussion of "Insulation" by a speaker to be announced.

*Continued on page 118*

**SEE**

## WESTINGHOUSE WATER COOLERS—1<sup>ST</sup> CHOICE EVERYWHERE

No other Water Cooler line offers so much for so little



IT'S THE



Strong statements? They sure are! But that's industry's appraisal of the cooler situation . . . because Westinghouse leads in sales . . . which

means that those who buy appreciate *quality*. See this best-selling line that is tops in quality features and dependability.

**BUILT RIGHT... PRICED RIGHT... AMAZINGLY FREE FROM SERVICE**

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## WESTINGHOUSE FRONT-DOR MILK COOLERS



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Baseboard level cooling eliminates back-breaking labor of lifting heavy milk cans. Westinghouse Front-Dor Milk Coolers do a superlative job of cooling milk quickly to 50°F. and below. You will also see a complete line of immersion-type milk coolers complete with labor-saving accessories . . . all with Hermetically-Sealed Drop-In Units.

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## THE NEW WESTINGHOUSE DEHUMIDIFIER... IT'S NEW... IT'S NOVEL!

Stops destructive dampness in the home, in stores, offices... in businesses everywhere. Drinks

moisture right out of the air . . . stops rust, rot, mildew, corrosion and warping.

**WESTINGHOUSE ELECTRIC CORPORATION • Electric Appliance Division • Springfield 2, Mass.**

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THESE QUALITY PRODUCTS AT THE  
7<sup>TH</sup> ALL-INDUSTRIES REFRIGERATION  
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NOVEMBER, 1951 • COMMERCIAL REFRIGERATION

# NEWS

## OF THE INDUSTRY

### NO CONSERVATION ORDER IMMINENT

No conservation order covering the manufacture of refrigeration and air conditioning equipment will be issued at the present time, NPA officials told members of the Refrigeration and Air Conditioning Industry advisory committee at a recent meeting in Washington.

Committee members agreed there is no need for such an order at this time.

The decision followed discussion of a proposed order which would have prohibited production of equipment not conforming to certain sizes, types, grades, finishes and specifications.

The proposed order would not assure the allotment of more materials to the industry, NPA pointed out. However, it would permit greater production of certain types of units with the available materials.

NPA told the committee there would be an increase in supplies of steel sheet and strip in the first quarter of 1952, but galvanized sheet supplies will remain severely low.

Copper will continue to be scarce for at least four more years, NPA reported, due to shortages of copper ore and scrap.

Aluminum supplies will be reduced in the fourth quarter and the first quarter of 1952, NPA said.

The committee said the industry will be seriously affected by the new cut in aluminum production as it has been substituting aluminum liberally for scarcer metals.

### YORK AWARDED NAVY CONTRACT

A long-term contract to build large naval aviation rocket motors, and valued at more than \$2,500,000, has been awarded by the U. S. Navy to York Corp.

### 1952 DAIRY SHOW SET FOR CHICAGO

The 1952 Dairy Industries Exposition will be held in Chicago, according to K. L. Wallace, president of the Dairy Industries Supply Association. Exact dates for the exposition have not yet been determined.

This is the first time the Dairy Show will be held in the midwest, and attendance is expected to surpass all previous records. The DISA Show, said to be the largest regularly held exposition in the world, has been held in Atlantic City up to now.

### DX SYMBOL COVERS "EMERGENCY" NEEDS

A new emergency symbol, DX, will be applied by National Production Authority on orders for products, components, and materials other than steel, copper, or aluminum when delay in delivery would jeopardize top-urgency defense programs, the agency has announced.

NPA officials emphasized that the new symbol does not constitute an additional priority band, but is an emergency service, strictly limited in use. It will be employed only by a central NPA headquarters unit when specially requested by the agency that needs the materials to assure completion to vitally needed production on schedule.

The DX symbol, when applied to a delivery order, may be extended by any supplier on whom it is served. That is, he may use it on his own orders for materials or products needed to fill his customer's DX order.

In this way, the DX order will differ from the special directives that NPA has been issuing in such cases. Directives could not be extended.

The DX symbol was brought into being by

amendments to NPA Regulation 2 and CMP Regulation 3.

Another change in NPA Regulation 2 provides that DO-rated orders bearing program identifications A, B, C or E, which have been accepted and scheduled for delivery, are to be given preference in delivery if the supplier is unable to deliver in time all DO orders on his books.

### NPA TURNING DOWN MOST CONSTRUCTION

National Production Authority has announced that its Construction Division has approved 458 applications for authorization to commence construction in the fourth quarter of 1951. It denied 2,080 of the 3,784 applications received.

According to new construction regulations announced Aug. 3, all construction comes under the NPA Controlled Materials Plan beginning with the fourth quarter of the year Oct. 1. All construction requiring more than certain minimum amounts of steel, copper and aluminum are required to apply to NPA for authorized construction schedules and related allotments of materials.

Because of increased demands for structural steel for direct defense programs, general commercial construction received only 11% of its stated requirements of this material for the fourth quarter.

### ANDERSON NAMED TO POST IN DPA

Ralph H. Anderson, Carrier's director of procurement, has been granted a leave of absence from the company to replace George N. Lilygren, Carrier vice president now on loan to the government, as one of three top assistants to the DPA's Director of Program and Requirements. Lilygren will return to Syracuse.

### TOWER MAKER WILL SELL THRU JOBBERS

Havens Structural Steel Co., manufacturer of cooling towers in capacities of 3 tons refrigeration and up, has announced a change in sales policy, effective Sept. 1, under which its "33" series and "Standard" series cooling towers and accessories will be sold only through refrigeration parts and supplies wholesalers.

According to W. R. Roeyer, sales manager of the company's Cooling Tower Division, the new policy, besides enabling Havens to concentrate on its sales program under a definite plan of action, will allow price structures to be kept uniform and in line with government policies.

Roeyer also pointed out that wholesalers will be able to carry a local stock of cooling towers and spare parts, thus serving all the "trade" in an area, and that firms also can render credit assistance to the trade on a local basis.

### "D" SYMBOL NO LONGER SPECIAL

The special preference granted to controlled materials orders bearing the "D" allotment symbol has been rescinded. National Production Authority has announced. The "D" symbol is applied to authorized controlled materials orders placed by the Civil Works Corps of Engineers, Department of the Army, Panama Canal Co., and the Domiciliary building, Old Soldiers Home.

These orders now carry equal status with other authorized controlled materials orders for civilian production. The only orders with a higher priority of acceptance are those bearing the symbols A, B, C or E, placed by the Department of Defense and the AEC.

# HOW'S YOUR TEMPERATURE? ...KEEP IT RIGHT WITH



**DOLE**  
Holdover  
**TRUCK**  
**PLATES**

Doc Doleco says—

If your truck temperature gets above 40° it's "lights out" for perishables. DOLE plates maintain a uniform 40° or any temperature you choose.



DOLE Holdover Plates installed in your delivery trucks are assurance that your products will reach homes or stores in as perfect condition as when they left your storage room. Temperatures will be maintained uniformly regardless of the load or the distance covered in your daily routes.

And your OWN temperature won't rise on account of product spoilage because DOLE Holdover Plates have been proven over many years the ideal type of truck refrigeration.

*Ask for Catalog C.*

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Navy Pier, Chicago  
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102

## ALL RATINGS EQUAL, NPA HEAD ASSERTS

NPA Administrator Manly Fleischmann recently made it clear that in determining first quarter 1952 allotments of steel, copper and aluminum under CMP to manufacturers of Class "B" (standard type) products, no distinction will be made between any of a manufacturer's shipments on non-military rated orders.

"The fact that we are asking manufacturers to report their shipments according to ratings when filling their first quarter 4B application forms should not be taken to mean that we plan to institute a graduated priority system," Fleischmann said. "The information requested is merely to permit us to follow allotments through to their ultimate use in the national economy."

"In processing first quarter 4B's, our first concern will be to make enough material available to fill Defense Department and AEC orders, those bearing the program symbols A, B, C or E. After that is done,

shipments on all other rated orders will be given equal consideration in making allotments.

"In addition, we recognize that the unrated portion of a manufacturer's shipments is likely to be just as essential as that part of his production distributed against rated orders. An example of this is provided by the shipment of fabricated products to essential uses through wholesale distribution channels. The movement of products through a wholesaler frequently results in shipments against unrated orders, a fact which does not determine essentiality of the end-use."

It is neither necessary nor advantageous to urge customers to obtain a rating before placing any order.

## TO EXPAND PLANT

A \$500,000 modernization of its Oil City, Pa., plant is planned by Washington Pump & Machinery Corp., according to an announcement by L. C. Ricketts, vice president in charge of manufacturing.

# NEW for '52

## LOUDON AUTOMATIC ICE CUBER

Makes  
180 Lbs.  
Per Day

SEE IT  
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BOOTH 486  
ALL-  
INDUSTRY  
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Model 7030TC

- Produces 70 Clear, Round, Solid Ice Cubes Every 30 Minutes
- Bigger Cubes — Bigger Storage Capacity
- New Water Valve Saves Water Costs
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**Loudon**  
MINNEAPOLIS

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NOVEMBER, 1951 • COMMERCIAL REFRIGERATION

## PROGRAM FOR ASRE MEETING ANNOUNCED

Four symposium-conferences on topics of current interest to technical refrigeration men will highlight the annual meeting of ASRE to be held Dec. 2-5 at the Hotel Roosevelt, New Orleans.

The conferences, which in some cases will run concurrently with the regular technical sessions, are for the discussion of (a) low temperatures, (b) domestic refrigerator engineering problems, (c) industrial insulation applications and (d) packaged air conditioners.

Subjects to be discussed at the low temperature symposium include: Freon and oil relationship in low temperature refrigeration; a description of the Laboratory of Cryogenic Engineering at MIT, its facilities and products; design and construction problems of air separation plants; low temperature application in the field of lyophilization; moisture removal from a -85 F methylene chloride refrigeration system.

The domestic refrigeration engineering conference will present a discussion of alternate materials, a subject of prime importance at present when production of basic materials is restricted. Representatives of suppliers of such basic materials as steel, copper, aluminum and chemicals used as refrigerants will present their outlook for both the present and the future of the use of these materials in the refrigeration industry.

At the conference on industrial insulation applications a panel of engineers will present brief "off the cuff" statements on specific applications, followed by discussion. Representatives of military agencies and industrial firms have been invited to serve as panel members.

"Packaged Air Conditioning—A Look to the Future" is the subject of the fourth conference. Topics will include room air conditioners, self-contained air conditioners, and residential air conditioning, and "Energy Sources for Packaged Air Conditioning" will be discussed by a prominent utility engineer.

Subjects at regular tech-

nical sessions will include "Refrigeration and Developments in Farm Milk Operations", a discussion of bulk cooling and handling; "Specific Heats of Foods"; "Fish Freezing", by a Norwegian engineer; "Atomic Radiation of Food"; "Refrigerator Cars and the Use"; "Citrus Fruits Storage"; "Measuring Ultra Rapid Temperature Changes"; "Electric Analogy of Heat Transfer"; "Some Unusual Air Conditioning Installations"; and the first report of experience and results on "The Calibrated Room Carolimeter Test Method", the method specified by ASRE Standard 16-R for testing and rating room air conditioners.

## COVELL QUILTS BAL-AIR FIRM

J. E. Covell, president and half-owner of Bal-Air, Inc., Nashville, Tenn., manufacturer of air conditioning equipment, has announced his resignation from the company.

Covell said he had a 45-day exclusive option to sell the business, and that several out-of-town firms are interested in it. "Our business out there has been very good", he said, and future business prospects look bright. He said he will return to Philadelphia.

The other owner of the business is C. L. Riegel, head of Tennessee Aircraft, Inc.

The business will continue to operate, it was reported. It employs about a dozen persons.

## KELVINATOR SHIFTS PRODUCTION MEN

Nash-Kelvinator Corp. has announced appointments affecting three production officials of its Grand Rapids, Mich., plant.

B. A. Chapman, Nash-Kelvinator production manager, said Joseph W. Mueller has been named assistant production manager for Kelvinator Div., with headquarters in Detroit.

George H. Beld, former general superintendent of the Grand Rapids plant, replaces Mueller as assistant works manager, and John Schuck, former superintendent of final assembly at Grand Rapids, becomes general superintendent.

## GETTING SET FOR 1952 SALES



Field sales and service representatives of Servel's Commercial Electric Refrigeration Division met in Evansville last month for their annual fall sales conference. Shown here are: First row, kneeling, left to right: C. L. Olin, J. A. Madden, P. A. Hunker, W. J. Neyland, J. R. Fleming, W. F. Cissell, G. E. Ploeger. Second row: J. W. Downen, J. N. Schnur, C. M. Heathman, O. J. Dail, Geo. S. Jones, Jr., A. F. Lateulere, G. S. Eager, J. A. Neuchs, R. L. Hawes, W. M. Russell. Back row: J. F. Zubrod, A. M. Schmitz, J. M. Stork, H. C. Preher, A. H. Counts, A. G. Wolf, C. P. Martin, O. B. Lance, W. G. Smith.

## SERVEL FIELD MEN MAP 1952 PROGRAM

Bureaucratic controls on American enterprise are making it harder to do business than ever before, but because there are so few good salesmen really working hard at selling, the opportunity to sell has never been greater, W. Paul Jones, president of Servel, Inc., told field sales and service representatives of the Commercial Electric Refrigeration Division at their recent fall sales meeting.

In the face of these conditions, he declared, today's salesmen must remember the basic principles of selling and practice them at all times.

O. J. Dail, assistant vice president and general manager of the Commercial Electric Refrigeration Division, presided at the conference. He presented the expanded line of Servel electric refrigeration units for 1952.

The line will include hermetic condensing units for commercial applications, ranging in size from 1/5 hp through 3 hp. New hermetically sealed capillary tube type condensing units will be featured as a part of the 1952 line. Servel will also offer hermetic power units in sizes from 1/3 hp through 5 hp for high temperature requirements.

Other speakers at the conference included George S. Jones, Jr., vice president of the company, and the following men from the Commercial Electric Refrigeration Division:

C. E. Ploeger, chief en-

gineer; A. H. Counts, production superintendent; O. B. Lance, advertising and sales promotion manager; G. S. Eager, service manager; John F. Zubrod, assistant to the general manager; A. M. Schmitz, manager of the application engineering department; A. F. Lateulere, manager of credit and collections; J. N. Schnur, assistant to the sales manager; and district managers W. F. Cissell (southwestern), J. R. Fleming (northern), P. A. Hunker (northeastern), J. A. Madden (southeastern), and Carl L. Olin (western).

## MARINES WILL GET 500 WATER COOLERS

Five hundred water coolers are to be delivered to east and west coast Marine bases during October and November under terms of a contract recently awarded to Sunroc Co., Glen Riddle, Pa., by the Department of the Navy, headquarters, U. S. Marine Corps, Washington, D. C. The coolers will be built in Sunroc's new quarter-million-dollar Glen Riddle plant.

## NEW WISCONSIN FIRM

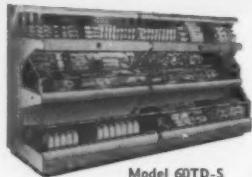
Comfort Air of Milwaukee has been incorporated in that city, according to the records of the Wisconsin secretary of state, "to engage in the manufacture, installation and sale of cooling and heating equipment," with a capital stock of 100 shares of common, of no par value. Incorporators are Paul A. Jarmon, J. J. Silber and Harold Harris.

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# SEE the complete EVANS LINE

At The 7th All Industry Show

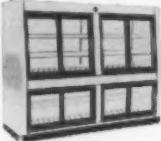
BOOTHS  
441  
445



Model 60TD-S



Model DD



Model DSS-8



Model SSM4

**EVANS**  
MANUFACTURING CORPORATION

460 So. Tenth Ave.

Mount Vernon, N. Y.

## ASHVE LABORATORY INSPECTION NOV. 1-2

A two-day reception and inspection for executives, society members and the press will be held by American Society of Heating and Ventilating Engineers in Cleveland, Nov. 1-2, to mark the completion of its Environment Laboratory, a facility for research in human comfort conditions and the development of data for the design and installation of panel heating and cooling systems.

There will be an inspection on both days at the ASHVE Research Laboratory at 7218 Euclid Ave., where the environment laboratory is rapidly being brought to completion. On hand to act as hosts and explain the operation of the new research tool will be society officers, the ASHVE committee on research, the society's director of research and his staff, and members of the technical advisory committee on panel heating and cooling, under whose overall direction the project was inaugurated.

Before inspecting the en-

vironment laboratory on Nov. 1, the invited executives will attend a luncheon at Hotel Statler at 12:15 p. m. where they will be addressed by Cloud E. Wampler, president of Carrier Corp. I. W. Cotton, chairman of the committee on research, will give a short briefing on the new laboratory. ASHVE President Lauren E. Seeley will preside.

"Members Day" will be on Nov. 2, when the general ASHVE membership will inspect the laboratory.

## YORK WILL COOL NINE CARGO SHIPS

John R. Hertzler, vice president and general sales manager, has announced that the company has secured contracts to furnish refrigeration systems for nine new cargo ships to be built in the U. S. and Canada.

Five of the ships will be built for the U. S. Maritime Administration by the New York Shipbuilding Co. of Camden, N. J., and four by the Canadian Vickers Co., Ltd., of Montreal.

## REPLACE THOSE OLD WORN-OUT MOTORS...

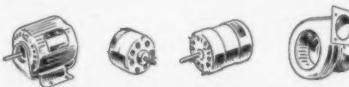


with *Redmond*  
**MICRO MOTORS**



Add new life to old refrigeration, air-conditioning, heating and ventilating equipment. Replace those worn-out fan motors with lively new Redmond Micromotors available in sizes up to 1/10th horsepower. If you are looking for life-time lubricated motors and brackets for con-

denser fans, use the dependable Redmond single-bearing Monomotors and easily adjustable Monomotor Brackets. Your Redmond distributor has all the details on the wide variety of Standard-Line Redmond Micromotors, Monomotors and Blowers.



SEE YOUR WHOLESALER, or write Redmond Distributors, Inc.  
420 Lexington Ave., New York 17, N. Y.

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NOVEMBER, 1951 • COMMERCIAL REFRIGERATION

# They do good turns by the thousands



with  
**EASY-FLO**  
and  
**SIL-FOS**

For over 20 years EASY-FLO and SIL-FOS have been favorites in the Refrigeration Industry, particularly for joining pipe and tubing. That's because these low-temperature silver brazing alloys consistently produce *strong, permanently leak-tight joints*, and do it *at top speed and bottom costs*.

So it is not surprising to find the Betz Corp., Hammond, Indiana—a leading manufacturer of cooling and refrigerating coils—using these alloys. They make a wide variety of coils, all formed of heavy-wall seamless copper tubing—and they braze all return bends with EASY-FLO while miscellaneous connections are joined with SIL-FOS.



Photos show the return bends on two different types of coils being brazed with EASY-FLO. If you could see how fast these operators go down a stack of coils you would appreciate what a high-production tool EASY-FLO can be, even when hand fed. Also, the joints need no finishing because EASY-FLO is so exceptionally free-flowing practically all of it goes into the joint area.

#### IF YOU NEED LEAK-TIGHT JOINTS

that will never work loose or need attention, there's no simpler, faster, more economical way to get them than with EASY-FLO and SIL-FOS. BULLETIN 20 will tell you *why* and *how*. Write for a copy today.



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# "We chose wisely in selecting Kelvinator!"

says GALEN MARCOTT, President, Cloverhill Co-operative Cheese Factory, Curtiss, Wisconsin

Build your business soundly—on the kind of customer satisfaction reported here by Mr. Marcott. Read his letter. Think of it when selecting equipment for your next installation or replacement job. See the complete range of unit sizes . . . and complete line of refrigeration parts and supplies,

competitively priced . . . at your nearest Kelvinator Parts Depot. Write, phone or stop in for helpful information on installation or service problems. Kelvinator, Division of Nash-Kelvinator Corporation, Detroit 32, Michigan.

CLOVERHILL CO-OPERATIVE CHEESE FACTORY

R # 1 Curtiss, Wis.  
August 30, 1951

Kelvinator Division  
Nash-Kelvinator Corp.  
14250 Plymouth Road  
Detroit 32, Michigan

Gentlemen:

We thought you'd be interested to know how pleased we are with the operation of our Kelvinator equipment.

A good example of our complete satisfaction is in the 3 horsepower Kelvinator condensing unit installed a year ago. Our directors checked the equipment of several major manufacturers and then decided on Kelvinator equipment for long, carefree, low-cost refrigeration.

This unit is connected to three lowside coils and refrigerates a 16' x 35' x 12' walk-in cooler. Constant low temperature is essential in this cooler and the dependability of the equipment is therefore positively a "must".

We have had one service call but have not spent one cent for service on this equipment since its installation. Convincing evidence that we chose wisely in selecting Kelvinator.

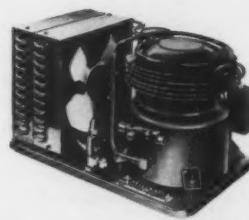
Yours very truly,

*Galen Marcott*  
President

CLOVERHILL CO-OPERATIVE CHEESE FACTORY



See the complete range of Kelvinator open-type condensing units—from  $\frac{1}{4}$  H.P. to 5 H.P.

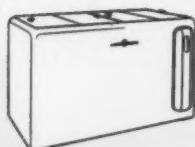


See the selection of 16 Kelvinator Hermetic Models, up to and including  $\frac{1}{2}$  H.P.

Profit Today... Build for Tomorrow with

## Kelvinator

The Name that Sells... The Name that Satisfies!



KELVINATOR BEVERAGE COOLERS



KELVINATOR FROZEN FOOD MERCHANDISERS



KELVINATOR WATER COOLERS



KELVINATOR ICE CREAM CABINETS



KELVINATOR AIR DRIERS

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and AIR CONDITIONING • NOVEMBER, 1951

**NEW**

# PRODUCTS

For further information on any of these products, simply circle on the postcard provided in this issue the key numbers of the items in which you are interested. Your requests will be forwarded directly to the companies concerned.

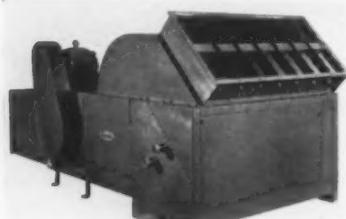
For news of the many new products displayed at the 7th All-Industry Refrigeration and Air Conditioning Exposition, turn to the "Tell-All" section starting on page 38 of this issue.

### Zone Conditioning Units

**Product:** New line of central system "zoning" Weathermakers designed especially to provide independent control of air conditioning in separate areas of a building through a single unit.

**Manufacturer:** Carrier Corp., Syracuse, N.Y.

**Features:** Five sizes available with capacities ranging from 12 to 58 tons. Number of zones possible with factory-built damper section varies from five for the smallest size to 14 for the largest. Particularly useful in multi-room buildings where cooling or heating loads vary in different rooms or areas due to changing position of sun, or in manufacturing plants where start-up or shut-down of heat producing equipment or the need for different processing temperatures makes zoning especially applicable. Units are of horizontal blow-through type. Damper control for separate



zones is provided through a double outlet arrangement with one outlet supplying cooled and dehumidified air and the other supplying warm air. These twin outlets are divided into separate damper compartments.

Independently operated double damper in each twin compartment regulates the proportion of warm and cool air for the zone. Although normally located on unit, entire damper section can be remotely located by using ductwork. Centrifugal fan section provides quiet high air capacity at low rotating speeds. Diffuser section achieves up to 10% savings in horsepower requirements. Sectionally constructed for easy handling and installation.

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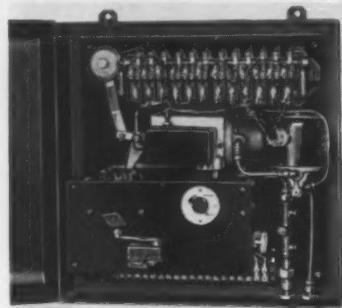
### Step Controller

**Product:** Pneumatic step controller for refrigeration compressors.

**Manufacturer:** Johnson Service Co., Milwaukee, Wis.

**Features:** Especially designed for controlling multiple stages of refrigeration capacity. Capacity control is accomplished by starting and stopping compressors in sequence, loading and unloading cylinders, or both. Available in 4, 6, 8 or 12-switch models. Each of the single-pole, double-throw switches is operated by a pair of cams on a shaft which is rotated by a pneumatic piston in response to a pneumatic temperature or pressure measuring instrument. On and off points of each switch are individually adjustable over entire range of operation. Several different springs are available for the piston, to provide a selection of ranges, or the piston may be provided with a pilot positioner which permits adjustment of operating range. Solenoid

exhausts air from piston, returning all switches to normal position whenever current is interrupted. Adjustable time delay providing up to 12 minutes for a complete piston stroke

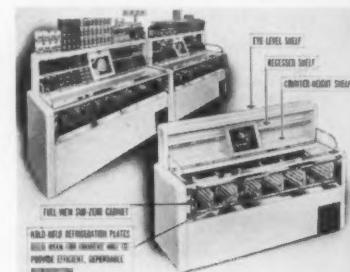


assures sequence starting regardless of demands of controller when power is restored. All internal wiring and air connections are provided. Ordinarily operated by a thermostat located in chilled water line, or by a pressure controller actuated by the suction pressure.

**Circle No. 132 on Reader Service Card**

### Merchandising Case

**Product:** "Display-Rite" merchandising case.



**Manufacturer:** Weber Showcase & Fixture Co., Inc., Los Angeles, Calif.

**Features:** Contains selling space from top to bottom, making important use of the space on top of the cabinet usually reserved only for displaying pictures. Provides a new high ratio of selling space to floor space, having 2464 cubic inches of selling space for every square foot of floor area. Non-refrigerated display at top of cabinet includes eye-level shelf and counter-height shelf, with recessed between. Full-view sub-zero

**BUY FROM YOUR  
REFRIGERATION WHOLESALER**

*Bend it!  
Twist it!  
Install it!*

WITHOUT  
SPECIAL  
TOOLS

#### UNDER BAR SOFT DRINK STATIONS

1/2" I. D. Armored Koroseal with stainless steel fittings used for 3 SYRUP LEAD LINES and 1 CARBONATED WATER LEAD LINE.



#### SODA FOUNTAINS

1/2" I. D. Armored Koroseal used for LEAD LINES with brass fittings FOR PLAIN WATER and stainless steel fittings FOR CARBONATED WATER. To find from heat exchanges, draft arms, variety of stainless steel sizes and thread adapters available from stock.

FLEXIBLE KOROSEAL ARMORED WITH STAINLESS STEEL FOR BEVERAGES • CARBONATED WATER • PLAIN WATER • CO<sub>2</sub> GAS • AIR • FRUIT SYRUPS • CITRUS FRUIT JUICES • GINGER ALE • COLA SYRUPS • MILK • COFFEE • ROOT BEER • HOT CHOCOLATE • BEER • ALE

IF YOU MAKE, SELL, SERVICE OR MAINTAIN EQUIPMENT SIMILAR TO THAT PICTURED ABOVE

YOU ARE INVITED TO SEND FOR OUR FREE CATALOG

**HEDEMAN PRODUCTS INC., GREAT NECK, N. Y.**



#### CARBONATORS

1/2" I. D. Armored Koroseal with brass fittings used for PLAIN WATER INLET LEAD LINE to pump and from pump to carbonator; 1/2" I. D. with stainless steel fittings for LEAD LINE FROM CO<sub>2</sub> TANK TO CARBONATOR; 1/2" I. D. with stainless steel fittings for CARBONATED WATER LEAD LINE from carbonator to fountain.



#### FOUNTAIN DISPENSERS

Armored Koroseal with stainless steel fittings used for CARBONATED WATER LEAD LINE from carbonator to dispenser.

H.I. PRESSURE  
**FLEXIBLE**

**Koroseal**

ARMORED WITH STAINLESS STEEL \*

**COSTS NO MORE** ... foot for foot, Braided Koroseal costs no more than any other tubing used.

**SAVES MONEY** ... users of Flexible Koroseal report better than 20% saving in footage used as compared with rigid connectors ... also report less fittings required.

**SAVES MAN HOURS** ... users of Flexible Koroseal report better than 50% saving in assembly and installation time. You can snake Koroseal through ducts and openings, bend it around sharp corners, twist it around curves without special tools or special connections.

**CUTS SERVICE CALLS** ... because Armored Koroseal is flexible, non-porous, translucent, tough, vibration proof, resists abrasion, tasteless, non-toxic, sanitary; doesn't crystallize, flake, rust, clog, chip, kink, split, stiffen, crack or peel; not affected by acids, oils, alcohol, lye; rodent proof, easy to keep clean, withstands hot or cold from 200° F. to -40° F.

**HEDEMAN PRODUCTS INC., GREAT NECK, N. Y.**

Telephone: Great Neck 2-3700 - Cable "Hedeman"



#### MULTIPLE DRINK VENDING

1/2" I. D.  
Armored Koroseal lines with stainless steel S.A.E. fittings used for SYRUP, CO<sub>2</sub> GAS AND CARBONATED WATER LINES. 1/2" I. D. Armored Koroseal used for PLAIN WATER INLET LEAD LINE to pump and from pump to carbonator.



cabinet uses cold plates as compartment dividers as well as refrigeration medium.

Circle No. 133 on Reader Service Card

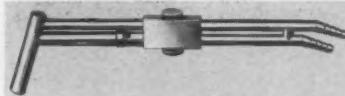
#### Soldering-Brazing Torch

**Product:** Precision soldering-brazing torch.

**Manufacturer:** Mass Co., Davenport, Ia.

**Features:** Portable torch is made of brass tubing with built-in thumb control to regulate flame from needle-point to pencil size. Will produce up

to 2500 degrees of heat. Natural, artificial, or bottled gas can be used. Torch can be attached to an air compressor or breath blown. Works successfully either as production tool or



as portable torch on job operations. Ideal for radiator, electrical, or sheet metal work, also silver soldering and light brazing.

Circle No. 134 on Reader Service Card

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exact  
size  
you  
need!



ANY SIZE  
ANY SHAPE  
ANY METAL

Write today for  
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"Technical Data  
for Cold Plates  
and Assemblies"



Depend on DEAN to appreciate your problems. That's why DEAN was the first to offer Cold Plates "job-tailored" to your requirements. Today, you can get any size and shape cold plate you need, *quickly!* If you have a particularly tough problem, such as a need for cylinders, U's, tanks, angles, etc., you can get them on special order *promptly!*

DEAN makes cold plates for ice cream cabinets, locker plants, freezer stands, soda fountains, farm milk coolers, farm freeze cabinets, low temperature test rooms, frosted food displays, industrial chilling, etc.

DEAN COLD PLATES  
are easy to install.  
Give dependable service.

**DEAN** PRODUCTS, INC.  
1042 Dean St., Brooklyn 16, N. Y. • Sterling 9-5400

See us at the All-Industry Show, Chicago, Nov. 5-8, Booth 203  
Circle No. 78 on Reader Service Card for more information

#### Dairy Merchandiser

**Product:** Model D-54M dairy product merchandiser.

**Manufacturer:** Jordon Refrigerator Co., Inc., Philadelphia, Pa.

**Features:** Specially designed to provide complete self-service dairy department for smaller food shops or as supplementary case for supermarkets. Refrigeration supplied by  $\frac{1}{3}$ -hp hermetic condensing unit mounted on slide-out tracks, and a heavy-duty full-length coil and air circulating fan that provides a steady flow of cool air over the entire contents of cabinet to maintain proper humidity conditions. Approximate capacity of merchandising area is over 100 quart containers in main section, with space on auxiliary re-



frigerated shelves for over 150 cartons of cheeses, eggs, butter, etc. Merchandising superstructure puts related items such as crackers, flavorings, etc., within easy reach. Slimline lighting directed from in front of triple Thermopane display glass and from beneath superstructure illuminates entire cabinet. Constructed of heavy gauge steel and finished in baked white enamel, cabinet measures 54 inches long, 58 $\frac{1}{2}$  inches in total height, and 30 inches deep.

Circle No. 135 on Reader Service Card

#### Resilient-Base Motors

**Product:** "Tri-Clad" line of single-phase, capacitor, induction motors now being offered with a resilient-base construction.

**Manufacturer:** General Electric Co., Apparatus Dept., Schenectady, N.Y.

**Features:** Designed for use where freedom from vibration and extra-quiet operation are required, this construction is available on motors rated from  $\frac{1}{2}$  to 5 hp. Prevents torque pulsation from being trans-

# Want less pressure drop in Line Valves?

## Get

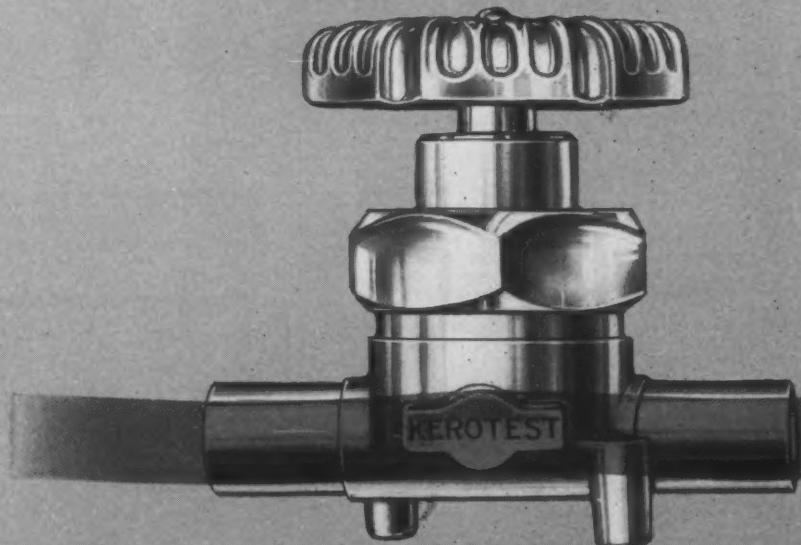


**IN-LINE  
DIAPHRAGM PACKLESS  
LINE VALVES**

*Check these  
"Extra Value" Features*

- ✓ **FULL FLOW**—wide passages, unrestricted flow pattern assures minimum pressure drop.
- ✓ **REDUCED SERVICING**—fatigue-free, special alloy, non-perforated diaphragms practically eliminate replacements.
- ✓ **FOOL-PROOF**—metal-to-metal seal back seating features permits safe diaphragm replacement under pressure if ever needed.
- ✓ **INSTALL FASTER**—special extended leg holds the mounting screws while you drive them. Prove this yourself!
- ✓ **CONVENIENT**—comfortable handwheel design permits easy operation from all positions even in cramped quarters.

Manufactured Exclusively by KEROTEST MANUFACTURING CO., PITTSBURGH 22, PA.



*Always Extra Value*

*at No Extra Cost*

**SEE YOUR**



**WHOLESALE**

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and AIR CONDITIONING • NOVEMBER, 1951

mitted to driven machine. Totally enclosed built-in transfer switch keeps foreign matter from contacts. Cast iron construction. Long-life lubricated ball bearings will run for years without attention, but provision is made for lubrication when necessary. Except for 5 hp size, which uses 230 volt only, the new motors operate on 115/230-volt, 60-cycle power supply.

**Circle No. 136 on Reader Service Card**

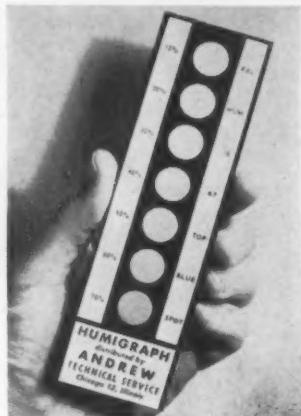
#### Humidity Indicator

**Product:** "Humigraph" humidity indicator.

**Manufacturer:** Andrew Technical Service, Chicago, Ill.

**Features:** Consists of a card measuring 6-3/4 x 1-7/8 inches with a vertical column of seven color spots denoting relative humidity from 10 to 70%. Changes in humidity cause spots to turn color. Usable at temperatures from 50 to 200 F. Superior in accuracy to inexpensive hygro-

meters at low and normal humidities and is dependable for many months. For small changes in humidity, card responds in about 10 minutes; for a change up to 40%, response time is about 30 minutes. Can be used as an insert for long term packaging of



## "Marsh FITS RIGHT INTO OUR SCHEME!"

With bodies machined from solid bar brass stock, the new Marsh-Electromatic Solenoid valves give new meaning to quality and dependability.



A team of thoroughbreds for the man who wants the ultimate in testing gauges.



Type WT Marsh-Electromatic temperature actuated regulating valve — one of many such regulators.

Twenty-eight years of going-all-out to please their customers has helped the A. E. Borden Co., Inc. of Boston, Mass., and Portland, Maine, grow from a small specialty business into a leading distributor of refrigeration equipment.

The photo above, taken in the Boston salesroom, shows (right to left) Chester Borden, vice president and treasurer, Arthur Timmins, shop foreman, and Frank Johnson of Marsh Instrument Co. Mr. Borden attributed the growth of his business to "adherence to top-quality products; prompt, complete service; close attention to inquiries; speedy movement of orders; and convenient display of lines carried.

"The Marsh line," he added, "fits right into our scheme of things. Our customers for gauges, thermometers and controls know and rely on Marsh, as do we. They want the Marsh line because it's good for them—which means it's good for us and business."

There's an alert distributor, like the Borden Co., on the job in your community ready to supply you with Marsh Instruments and Marsh Electromatic Valves. Look over some of these popular products here. Then for the complete story:

#### See Your Jobber

**See our exhibit BOOTHES 319-321**

**NAVY PIER CHICAGO NOV. 5-8**

**MARSH INSTRUMENT COMPANY**, Sales affiliate of Jas. P. Marsh Corp., Dept. P, Skokie, Illinois. Export Dept., 155 E. 44th St., New York, N. Y.

# MARSH

Refrigeration Instruments

**Circle No. 80 on Reader Service Card for more information**

materials affected by humidity changes, or for "spot" checking of humidity without recourse to instruments or charts. Also usable as attention-getting advertising medium.

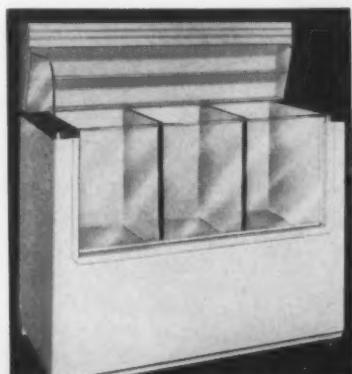
**Circle No. 137 on Reader Service Card**

#### Dairy Display

**Product:** Model OT-48G display case for milk and dairy products.

**Manufacturer:** Howard Refrigerator Co., Philadelphia, Pa.

**Features:** This new case has 9-cu. ft. capacity and holds 196 quart-size milk cartons. Glass front gives complete visibility. Comes completely



equipped with glass side panels. Casters are standard equipment. Superstructure has been converted so that there is a useful utility shelf and ticket moulding strip.

### Bolt-Clearance Sockets

**Product:** New series of  $\frac{1}{4}$ -inch drive, 2-inch deep, bolt-clearance sockets.

**Manufacturer:** Bonney Forge & Tool Works, Allentown, Pa.

**Features:** Precision made, thin walled, and sturdy, these sockets eliminate the need for a short exten-



sion in hard-to-reach adjustments. Will serve countless applications. Available either singly or in a set of eight progressive sizes from  $\frac{3}{16}$  to  $\frac{7}{16}$ -inch.

Circle No. 139 on Reader Service Card

### Rectangular Dehumidifier

**Product:** Compact electric dehumidifier of rectangular shape.

**Manufacturer:** Frigidaire Div., General Motors Corp., Dayton, Ohio.

**Features:** Filters room air as well as removing excess moisture. Will handle areas up to 8000 cu. ft. in size. Plugs into any electric outlet. Suction fan draws room air through special filter and over refrigerated coils. Moisture in air condenses and collects on coils, then drops into porcelain container or permanent drain as desired. Measures only  $18\frac{1}{4}$  inches high,  $20\frac{1}{2}$  inches long, and  $11\frac{3}{4}$  inches wide. Convenient hand holds on either end of shell. Also has four leveling glides. Evaporator and con-



denser are vertically mounted. Air circulation provided by four-bladed  $8\frac{1}{2}$ -inch diameter fan at rate of 165 cfm. Powered by  $\frac{1}{6}$ -hp sealed compressor.

Circle No. 140 on Reader Service Card

### Hose Clamp

**Product:** Stainless steel quick-coupling clamp (Series 21) which assures efficient seal for all types of hose and duct connections.

**Manufacturer:** Specialty Products Co., Cleveland, Ohio.



**Features:** New hinged latch for quick assembly and removal. Design of latch assembly combined with stainless steel construction makes clamp suitable for high temperature,

## ARE YOU LOSING \$319.37 PER YEAR



or do you have a

# Service-Master

"the refrigeration service body?"

With your present truck you probably spend 15 minutes a day looking for parts or returning to your shop. If your service charge is \$3.50 per hour, you lose \$319.37 yearly.

Service-Master saves this unproductive time by taking a complete workshop to every job. Parts are easy to find—in weathertight compartments which can be locked to prevent theft. What's more, there's plenty of room for bulky items in the larger-than-a-pick-up cargo space. Get further details, today—just mail the coupon below.

Available for  
immediate delivery  
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City \_\_\_\_\_ Zone \_\_\_\_\_ State \_\_\_\_\_

345

Circle No. 81 on Reader Service Card for more information

pressure, and corrosion resistance. Clamp has unusually high strength-to-weight ratio. Engineered to specific requirements.

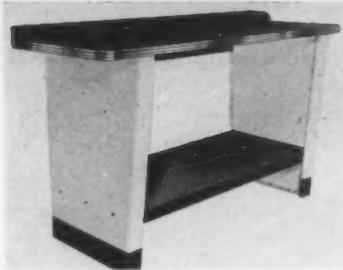
Circle No. 141 on Reader Service Card

#### Work Bench

**Product:** "Scotty" all-purpose metal work bench.

**Manufacturer:** Natkin & Co., St. Louis, Mo.

**Features:** Steel construction with "Nat-Flex" top made of many layers of selected woods, pressure-laminated



and topped by thick, tough, surface-sealed plastic base composition. Nat-Flex is non-conductor, resistant to oil,

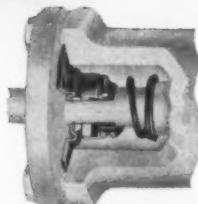
grease, water, and abrasion. Will not fracture or break and is easy to clean. Deadens sound and greatly reduces vibration. In addition to 10 sq. ft. top, the bench has a full steel storage shelf placed within easy reach and allowing ample space for cleaning under bench. All corners of legs and shelf are welded. Finished in two coats of baked enamel. Back of bench has rigid retaining lip to prevent tools and parts from falling to floor. Same bench is available with heavy steel top if desired.

Circle No. 142 on Reader Service Card

## ROTARY SEAL Replacement Units

UNIT NO.

1115



AVAILABLE FOR MORE THAN  
900  
COMPRESSOR MODELS

*Easy to Install Efficient in Operation  
Simple in Construction Economical*

For Commercial, Semi-Commercial, Air-Conditioning and Home Refrigerator Compressors . . Proven by outstanding performance over 20 years!

AT  
ALL

THE  
mechanical  
seals for

LEADING  
JOBBERS

"Seal with



Certainty!"

**2020 NORTH LARRABEE STREET  
CHICAGO 14, ILLINOIS, U.S.A.**

CANADIAN AGENT: 2025 ADDINGTON AVENUE  
MONTREAL 28, QUEBEC, CANADA

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114

NOVEMBER, 1951 • COMMERCIAL REFRIGERATION

#### Low-Boy Display

**Product:** New full-vision low-boy display case (Model FV-4300).

**Manufacturer:** Fogel Refrigerator Co., Philadelphia, Pa.

**Features:** Standing only 43 inches high, this case features a formica counter top. Triple pane front glass is hermetically sealed. Wide bottom shelf and two mezzanine shelves give maximum food storage area. Fluorescent interior lighting. Welded all-



steel case finished inside and out with baked enamel. Positive air circulation with gravity coils at top and bottom eliminates any warm spots and provides proper humidity control with low operating cost. Refrigeration unit of 1/4-hp capacity can be located at side of case in special housing. Available in 4, 6, and 8-foot lengths.

Circle No. 143 on Reader Service Card

#### Reversible Case

**Product:** Six-foot Model UL 2706C "reversible-convertible" display case.

**Manufacturer:** Sherer-Gillett Co., Marshall, Mich.

**Features:** Reversible-convertible features consist of unique plugs which can be reversed in the base of the

case so that it can be converted from a front-door opening double-duty case to a rear-door opening double-duty unit. If two solid plugs are used (front and rear) the case operates as a single duty case. If two sliding-door plugs are used front and rear, the refrigerated base performs a "pass-through" function. These changes

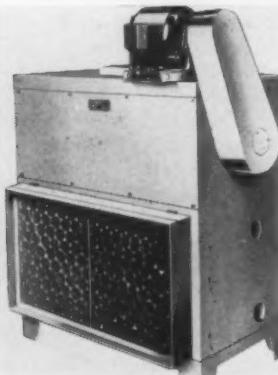


can be made readily even after case has been installed. Case also offers three options in that it is available with counter height stainless steel cap so that service from rear is utilized, a 59-inch high overall low canopy with fixed reflective mirrors, and a 66-inch high overall canopy with sliding door reflective mirrors for rear servicing of displays. Incorporates exclusive coiling system of all Sherer self-service cases.

**Circle No. 144 on Reader Service Card**

#### Compact Conditioner

**Product:** Unusually compact year-around air conditioning unit (Type AA).



**Manufacturer:** Trane Co., La Crosse, Wis.

**Features:** Designed especially for concealed installations in space-tight tourist courts, hospitals, hotels, small apartments, homes and offices. Suit-

able for either individual rooms, central systems, or the central zones of multi-room installations. Made in both horizontal and vertical models with wide range of coil combinations and motor arrangements. Requiring minimum service, it can be installed in furred ceiling spaces, closets, utility areas, or other normally wasted space. Operating with chilled and hot water systems the units are available with base air volumes ranging from 200 to 600 cfm.

**Circle No. 145 on Reader Service Card**

#### Portable Humidifier

**Product:** New heavy-duty all-purpose humidifier.

**Manufacturer:** Daffin Mfg. Co., Lancaster, Pa.

**Features:** Model 500 humidifier is table model type especially designed for use in egg storage rooms, cold storage rooms and other locations where lack of proper humidity is harmful either to persons present or products being stored. Positive output of Model 500 is 2½ pounds of water per hour; unit contains au-

**Simpson**  
390  
**VOLT - AMP - WATTMETER**

*Simpson 390 Volt-Amp-Wattmeter embraces two ranges each of voltage and current providing four wattage ranges which cover practically all types and makes of appliances. Preferred by most servicemen.*

RANGES: A. C., 60 cycles—Volts: 0-150, 0-300; Amperes: 0-3, 0-15; Watts: 0-300, 0-600, 0-1500, 0-3000; price with Break-In plug and leads, and Operator's Manual \$39.50

**SIMPSON ELECTRIC COMPANY**  
5200-18 W. Kinzie, Chicago 44, Ill.  
In Canada:  
Bach-Simpson, Ltd., London, Ont.

**Circle No. 83 on Reader Service Card for more information**

tomatic float valve and can be adapted for automatic control with a humidi-stat. Equipped with capacitor motor guaranteed for one year.

Circle No. 146 on Reader Service Card

### Ice Cream Refrigerator

**Product:** Newly designed low temperature display case (Model OLT-7CV-I) for merchandising ice cream.

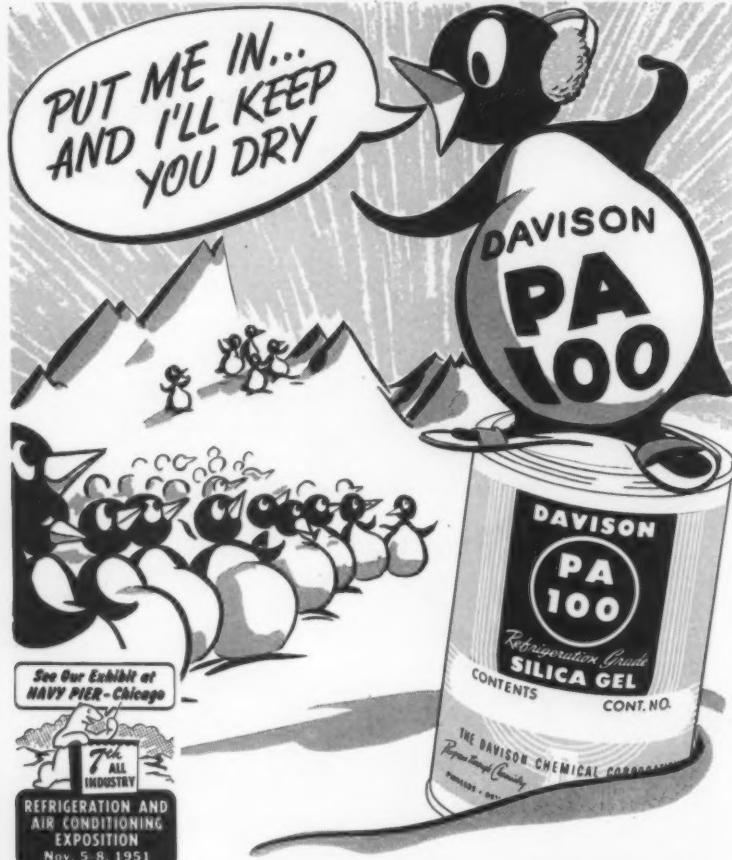
**Manufacturer:** Hussmann Refrigeration, Inc., St. Louis, Mo.



**Features:** Large capacity allows for display of approximately 600 pint packages of ice cream. Self-contained semi-hermetic condensing unit using

F-22 refrigerant assures economical operation at lower temperatures. Automatic defrosting requires no drain. Dual coiling of plates in product area and overhead coil keeps merchandise in ideal condition in open display.

Circle No. 147 on Reader Service Card



More and more people are casting their votes for PA-100, the refrigeration grade silica gel that gives the best possible moisture protection. PA-100 can dry refrigerants to moisture levels that cannot be reached by other refrigerant drying agents.

Being completely inert, PA-100 cannot cause corrosion . . . actually helps prevent it by removing corrosive compounds from the system. And there is no danger of its dusting, caking, deliquescing, channeling refrigerants or causing any other undesirable reaction.

Cast your ballot for PA-100. Available in cartridges or bulk can.

Progress through Chemistry

THE DAVISON CHEMICAL CORPORATION



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PRODUCERS OF: CATALYSTS, INORGANIC ACIDS, SUPERPHOSPHATES, PHOSPHATE ROCK, SILICA GELS, SILICOFLUORIDES AND FERTILIZERS

Circle No. 84 on Reader Service Card for more information

### Sheet Metal Saw

**Product:** Sheet metal saw designed primarily to speed production in sheet metal shops by replacing tedious hand shearing operations with stack sheet cutting method.

**Manufacturer:** Bett-Marr Mfg. Co., Hopkins, Minn.

**Features:** Cuts stacked (50 or more) galvanized metal sheets at speeds up to 15 inches per minute. Handles complicated cutting jobs for ductwork fittings in fraction of time required for hand cutting. Also usable for working in plastic or wood. Smooth powerful chain drive gear



eliminates blade chatter and allows full power at slow speeds for cleaner, faster cutting. Speed range from 125 to 2200 fpm gives quick selection of correct blade speed for material to be cut. Takes blade up to and including 1/2-inch width. Extra depth 8 3/4-inch cut especially adaptable to finishing castings. Compact smooth design table size (20 x 22 inches) is adequate for large work. Set of four sheet metal clamps and riser bar insert to match are included.

Circle No. 148 on Reader Service Card

### Low-Temp Cabinet

**Product:** Low temperature merchandising cabinet (Model GF) with non-fogging glass front.

**Manufacturer:** Savage Arms Corp., Utica, N.Y.

**Features:** Full display provided by non-fogging glass front consisting of 4-ply pane of thermal glass plus protective plate of glass next to products. Five full-color ice cream pic-



tures in superstructure are lighted by fluorescent tube which also highlights contents of cabinet. Refrigerated by 1/2-hp hermetic condensing unit. Six evaporator plates form five compartments for separation of flavors or brands.

Circle No. 149 on Reader Service Card

## 2 AUTOMATIC FREEZERS FOR WASHINGTON PLANT

Belt-Ice Corp., Seattle, has installed two Knowles automatic package freezers at the plant of the Evergreen Frozen Food Co., Snohomish, Wash. Each machine has a capacity of 1400 twelve-ounce packages in the freezing cycle, machines being loaded at the rate of 50 packages per minute each. Capacity of the machines is 100 packages per minute.

Conveyors carry the material to be frozen to the automatic freezers direct from the packaging and wrapping machine, and the packages are transferred to a second conveyor line after passing between moving refrigerated plates.

Refrigerant to the freezers is gravity feed ammonia, each machine being equipped with a small accumulator and automatic float control.

## EXTENSIVE COOLING IN NEW LINCOLN PLANT

Both air conditioning for office space and cooling treatment for plant areas is being utilized at the new modern plant opened recently by Lincoln Electric Co. in Euclid, Ohio, a Cleveland suburb.

Two Worthington centrifugal re-

frigeration units are used for air conditioning and to supply chilled water for process requirements.

Central office space of about 48,000 sq. ft. will be air conditioned, and some factory spots will be given "cooling" treatment as well.

One of the two Worthington centrifugal refrigeration units of 365-ton capacity is driven by a 350-hp squirrel cage induction motor through a Moore D3 speed increasing gear complete with automatic suction damper control of capacity. The other 365-ton unit is driven by a 350-

hp squirrel cage motor through an American Blower hydraulic coupling and Moore D3 increasing gear with capacity control by speed variation through the hydraulic coupling.

## IN NEW LOCATION

The Philadelphia office of the Ice Cream Cabinet Division of Nash-Kelvinator Corp. has been moved from 716 Bankers Securities Building, Philadelphia, to 205 Main Line Center Building, 50 E. Wynnewood Road, Wynnewood, Pa.

# DOOR GASKETS FOR REFRIGERATORS & COOLING ROOMS

For nearly a quarter of a century JARROW PRODUCTS has specialized in designing refrigerator door gaskets to meet the most exacting standards of original equipment manufacturers. Embodying matchless quality with precision workmanship, Jarrow Door Gaskets offer the ultimate in efficiency and endurance.



## HEAVY DUTY SEALING STRIP

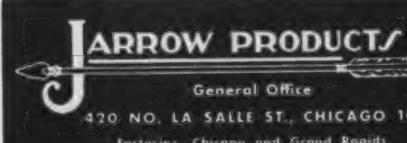
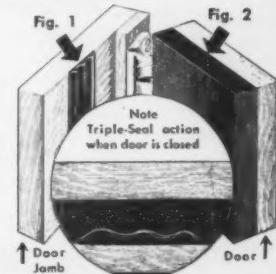
For Heavy Freezer Doors, Walk-In Coolers, Refrigerated Trucks, Etc.



A positive, air-tight, seal is assured with this Heavy Duty Sponge Rubber Strip compressed under door pressure against a ribbed faced, hard rubber triple-seal.



Sponge rubber seal is supplied with Neoprene or Molded Skin coating. Fig. 1 shows installation of hard rubber seal on door jamb. Fig. 2 illustrates sponge rubber seal cemented to door.



**Manufacturers:**  
Send us your gasket specifications.  
We are specialists in making door gaskets for new and unusual applications. Consult us on your gasket problems.

Circle No. 85 on Reader Service Card for more information

and AIR CONDITIONING • NOVEMBER, 1951

## RACCA MEETING . . .

Continued from page 99

Two additional talks will end the first day's program. Warren W. Farr will outline "Progress with RACCA", and president Ted Reina will discuss "Plans for the Continued Growth of RACCA".

The annual RACCA membership meeting and election of officers for the coming year will be held on Sunday, Nov. 4, beginning at 10 a.m. This will be a closed meeting for

RACCA members only. However, all contractors and others interested in contractor problems, whether or not they are members of RACCA, are invited to attend the morning and afternoon sessions on Nov. 3.

## NCRSA MEETING . . .

Continued from page 99

6, will be a Sales Training Panel, at which three speakers will present subjects touching on this problem, followed by questions from the floor.

Speakers and their topics include: "How We Train New Salesmen", Paul Allen, of Paul Allen Refrigeration Co., Little Rock, Ark.; "How Our Incentive Program for Salesmen has Aided Sales", Frank D. Stella, F. D. Stella Products Co., Detroit; and "How We Supervise Our Salesmen and What Reports are Required", R. J. Wischusen, Engineering and Refrigeration, Inc., Jersey City, N. J.

Nomination and election of officers and directors for the following year will follow, and will close the annual meeting.

## RSES MEETING . . .

Continued from page 99

The 14th annual RSES banquet will be held at 7 p.m Sunday night in the Terrace Casino.

Morning sessions only have been scheduled for Monday and Tuesday, Nov. 5 and 6, so that all RSES members will have full opportunity to attend the 7th All-Industry Show at Navy Pier.

At the Nov. 5 meeting, discussion topics will include "Truck Refrigeration" and "Servicing the Domestic

**NO SPEECHES**, and plenty of high-class entertainment—that's the "ticket" at the 14th annual banquet of RSES in the Terrace Casino of the Morrison Hotel, to which everybody in the industry who's in Chicago on Sunday, Nov. 3, is invited.

Heading the floor show will be Yonely, nationally famous musical clown, the Dorothy Dorben dancers, and others, with music for acts and dancing furnished by Roger Wolff and his orchestra.

As an added attraction, the Kraft Choral Society will entertain during the banquet and before the floor show. Many will remember this group as the one featured on Bing Crosby's radio program at Christmas in past years.

Advance banquet reservations may be made through Dwight Orr, entertainment chairman, c/o RSES, 435 N. Waller Ave., Chicago.

Refrigerator", with the speakers to be announced. The meeting will recess at noon.

Closing session on the morning of Tuesday, Nov. 6, will feature a talk on "Window Conditioners—Service Problems", by Joseph Askin, chief engineer of Techniflex Corp.



. . . for sales and profits  
. . . for economy and dependability

Federal offers you over 30 years refrigeration "know how".

PIONEERS in refrigeration . . . nationally accepted for outstanding performance. Day in and day out Employee and Customer alike can rely on Federal performance... whenever they want it.

Federal leader in sales, designers of modern refrigeration units, amazingly free from service . . . offers proof of acceptance in outstanding performance.

- ✓ BUILT TO LAST
- ✓ PRICED TO SELL
- ✓ FOR SMALL STORES OR SUPER MARKETS.

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FEDERAL REFRIGERATOR MFG. CO.  
Waukesha, Wisconsin

I am interested in the Federal Line for '52. Please send me complete information.



### FEDERAL THE COMPLETE LINE FOR '52

- Self-Service Dairy-Produce and Meat Displays . . . Walk-ins . . . Reach-ins . . . Freezers . . . Service Cases . . . Spot Merchandisers . . . Beverage Coolers . . . Fruit Juice Merchandisers.
- Join the Federal Dealer Group, some very desirable territories still open for greater sales and profits.



**Federal**  
REFRIGERATORS

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## TWO WAYS OPEN TO REPLACE COPPER

Distributors of brass mill products, including refrigeration supplies wholesalers who handle tubing and other brass mill products, apparently are given only two methods of replenishing their diminishing inventories under the terms of NPA Order M-82, effective September 1.

(1) Place an order with a brass mill each month for replacement in his inventory of an equal weight of brass mill products corresponding to the amount used in filling DO or CMP rated orders in the past month.

(2) Place additional orders for products to the amount of 5% of the difference between his average monthly inventory, by weight, during the base period and such inventory at the end of the last business day of the month.

Following are pertinent parts of the M-82 order:

Sec. 4. **Monthly X6 quotas.** (a) Commencing on Sept. 1, 1951, any distributor who during the preceding month has delivered brass mill products from his inventory to fill orders bearing a DO rating, or authorized controlled material orders placed with him, may place an order with a brass mill for replacement in his inventory of an equal weight of brass mill products, to which order the allotment symbol X6 may be applied. In addition, a distributor whose inventory (by weight) on the last business day of any month is less than his average monthly inventory (by weight) during the base period may place an order bearing the allotment symbol X6 with a brass mill during the succeeding month for 5 per cent of the difference between his average monthly inventory (by weight) during the base period and such inventory at the end of the month. The total weight of orders placed by any distributor with brass mills in each month shall, however, in no event exceed 150 per cent of the average monthly weight of deliveries of brass mill products from brass mills to such distributor during the base period.

Sec. 5. **Limitations on acceptance of X6 orders by brass mills.** (a) A brass need not accept an X6 order from any distributor if such distributor was not a purchaser of brass mill products from such brass mill during the base period.

(b) A brass mill need not accept an order rated X6 from a distributor for any item of brass mill products which such distributor did not purchase from the brass mill during the base period.

(c) Any distributor who is unable to place an order bearing the allotment symbol X6 due to the limitations of this section should apply to the National Production Authority who will assist him in locating sources of supply.

Sec. 6. **Limitations on acceptance of orders by distributors.** (a) A distributor may not accept (1) an order from any one person for more than 2,000 lbs.

of any item of brass mill products without the written approval of NPA, or (2) orders for any brass mill products in excess of the distributor's inventory of such products (including such products in transit to the distributor) on the date of the receipt of such order. Distributors are not required to accept any rated order for more than 500 lbs. of any item of brass mill products of 50 per cent of the distributor's inventory of such item, whichever is less, unless otherwise directed by NPA. For the purposes of the quantity limitations of this section, a distributor shall regard separate orders placed for delivery in the same month for the same item by any person as one order.

(b) A distributor may accept an order

for brass mill products for direct shipment from the brass mill to the customer only to the extent that such order is acceptable to the brass mill. Such a transaction shall not be considered a sale or delivery by a distributor for the purposes of this order.

Sec. 7. **Inventory limitations.** No distributor may accept delivery of brass mill products from domestic brass mills if his inventory is, or by such receipt would become, in excess of his average monthly inventory during the base period (excluding therefrom the months during which he was not engaged in a business of distributing brass mill products) or in excess of a practicable minimum working inventory as defined in NPA Reg. 1, whichever is less.



*Locks, Strikes and Hinges  
that Contribute to Quality*

*in the World's Finest Refrigerators*

*Grand Rapids Brass Company*

GRAND RAPIDS, MICHIGAN

A DIVISION OF CRAMPTON MANUFACTURING COMPANY

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# about PEOPLE

**A. V. Peterson** has been appointed assistant sales manager for Par Compressor Div., Lynch Corp., covering both air compressors and refrigeration units. Following service in the Navy during World War II, Peterson joined Par Compressor



Div. in the summer of 1946, handling allocations. In 1948 he was appointed southeastern district sales manager with headquarters in Atlanta, Ga., and remained in this position until his recent promotion.

**J. Herbert Behm** has been appointed staff assistant to the manager of engineering of General Electric's Small Apparatus Division, it was announced recently by Byron A. Case, division manager of engineering. He will make his headquarters at Lynn, Mass.

**Weston (Wes) Vogel** has been appointed manager of the Refrigeration Division of Savage Arms Corp.,



W. Vogel



J. J. Swisher

according to F. F. Hickey, president and general manager of the company. T. E. Hoye has resigned as manager of the division as of Oct. 1. Vogel has been with Savage since 1921, and has been active in ice cream cabinet sales

work since 1925. He has been secretary of the corporation since April of this year. Vogel's principal office will be at Savage's New York headquarters, 60 East 42nd St. **John J. Swisher** has been named assistant manager of the division, with headquarters at the factory office in Utica, N. Y. He has been with the Savage organization for the past four years.

In two important shifts in the executive lineup of Typhoon Air Conditioning Co., Inc., **Don V. Petrone**



D. V. Petrone



J. E. York

has been appointed executive vice president of the company, and **John E. York** has been selected to head Typhoon's national sales force as sales manager. Petrone joined Typhoon in 1935, and has previously been export manager, and sales manager. He was elected vice president in 1947. York has been with Typhoon for five years, most recently as district sales manager for the New York and New England sales territory. Previously he was with C. V. Hill Co. and General Electric Co.

years service. Atkinson has been a salesman in the Detroit office for 23 years with the exception of 3½ years service in the Navy during World War II. **A. W. Maas** was appointed man-



M. B. Atkinson



A. W. Maas

ager of the San Francisco electrical office succeeding E. D. Pike who retired with pension after 49 years with the Wagner company. Maas has been a sales engineer for the company since 1939.

**George A. Schnier**, who is well known in the Southern California refrigeration industry, has joined Eston Chemicals, Inc., of Los Angeles as sales manager of refrigerants for the western division. Schnier has had extensive experience in both sales and installation work in the refrigeration field and brings with him to Eston a wide technical background.

Appointment of **Anthony G. Ruediger** of Dayton, Ohio, as di-

rector of procurement for Carrier Corp. is announced by G. R. Auld, vice president in charge of manufacturing. Ruediger will take over the post vacated by Ralph H. Andersen, who

granted a leave of absence to fill an important administrative position in the Defense Production Administration in Washington. Ruediger has been with Chrysler Corp.'s purchasing department for the past ten years and has served as purchasing agent for that company's Airtemp Div. since 1946. He was elected president of the Purchasing Agents Association of Dayton in May of this year. He has had more than 20 years of experience in the purchasing departments of va-

# TYPHOON

PRESENTS WITH PRIDE

THE NEW

# Prop-R-temp

HEAT PUMP



See it at the

## 7th REFRIGERATION and AIR CONDITIONING EXPOSITION

Chicago, Ill. — Navy Pier

November 5 - 8

BOOTHES 328-330-332

Typhoon's Prop-R-Temp, in a simple, foolproof package, provides perfect year 'round air conditioning...cozy warmth in winter without fuss or fuel, and perfect summer cooling.

This completely automatic 'round the calendar comfort machine is equally suitable for home or industry...2 to 20-Ton sizes.

Typhoon Self-Contained Air Conditioning Units— $1\frac{1}{2}$  to 20 Tons

Typhoon Evaporated Condensers—3 to 20 Tons



## TYPHOON AIR CONDITIONING CO., Inc.

794 UNION STREET, BROOKLYN 15, N.Y.

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and AIR CONDITIONING • NOVEMBER, 1951

**IT'S HERE**

# The Sub-Zero

MADISON, WISCONSIN

LINE FOR 1952

- WHITE BAKED ENAMEL EXTERIOR
- SATINY ALUMINUM INTERIOR
- THICK, FIBRE GLASS INSULATION
- DEPENDABLE, EFFICIENT COMPRESSORS
- SEPARATE COMPARTMENTS INDIVIDUAL DOORS
- FREEZERS FROM 17 TO 60 CUBIC FEET CAPACITY
- MODERN, ATTRACTIVE DESIGN
- BACKED BY 25 YEARS EXPERIENCE
- 5-YEAR GUARANTEE AVAILABLE
- PRICED TO SELL



MODEL 25V — A new model with 25 cu ft. capacity. Four inner compartments. Dimensions: 38½" x 29" x 72".

It's here! A new Sub-Zero freezer line — featuring new designs . . . new capacities . . . and with the same highest quality construction that has made Sub-Zero a leader in the field. Sell the best — sell Sub-Zero for extra profits — Write today for complete information.

See our Display at the R.E.M.A. Show, Nov. 5 — Booth 457

**SUB-ZERO FREEZER CO., Inc.**  
MADISON, WISCONSIN

## SUPERFLOW Manufacturing Company

The Superflow Manufacturing Company invites inspection of the revolutionary new beverage dispensing system that will be on display in operation at the 7th All-Industry Refrigeration and Air Conditioning Exposition. Booth No. 516.

### The Equipment Features:

1. Balanced automatic pressure thermostatically controlled.
2. Circulation of beverage to accomplish refrigeration of lines and keg.
3. No precooler required.
4. Self-cleaning.
5. Flexible on installation.
6. Minimum service.
7. Compact packaged item.
8. Low in cost.
9. Solves all dispensing problems.
10. Faithfully preserves the brewed-in gases, flavor and taste.

Allocations allow materials to adequately supply a limited number of distributors. Licenses available in a few territories.

**SUPERFLOW Mfg. Co.**  
801 BROADWAY, CLEVELAND 15, OHIO

Circle No. 91 on Reader Service Card  
122

## THE MACK OIL SENTRY Refrigeration Compressor Oil Pump



- Measures Oil as Pumped
- Seals the oil can
- Faster and Safer
- Fits any 1 gal. can of refrigeration oil
- Fills at any angle

**NEW!**

All Sentries now equipped with a nozzle to fit  $\frac{1}{8}$ " pipe openings on compressor crankcases.



**SEE YOUR JOBBER**

To the trade \$6.95 net  
National distributor

**A. E. BORDEN CO.**

176 BROOKLINE AVE., BOSTON, MASS.

Circle No. 92 on Reader Service Card

NOVEMBER, 1951 • COMMERCIAL REFRIGERATION

rious manufacturing and construction companies. He is taking over his duties at Carrier immediately.

Jess Kaiser has been appointed district factory representative for

Schaefer, Inc., Minneapolis, in the states of Virginia, North and South Carolina, and West Virginia, and in the adjacent counties in Kentucky, Maryland and Delaware. Kaiser,

who has had broad experience in the merchandising and sale of low temperature cabinets, formerly was a special factory representative for Schaefer on home freezers.

Acme Industries, Inc., announces the appointment of Arthur A. Reed

as a sales representative of the company for the state of Michigan. He will handle the sale of all Acme "Flow-Cold" products and the jobber line in this territory. Reed has an

extensive background in refrigeration and air conditioning sales. For the last six years, he was a manufacturer's representative for the Clark Bridgman Co. of Chicago, selling refrigeration equipment. From 1939 to 1945, he was a sales engineer for the Cherry-Burrell Company working from Boston. From 1927 to 1939 he was with the Frigidaire Sales Corp. in various posts, including district sales engineer and later commercial district representative for Connecticut.

Election of two new vice presidents has been announced by Delavan Manufacturing Co. Phil Tamasi has been named vice president in charge of production. Tamasi joined Delavan in 1944 and has been plant superintendent for the past 4 years. Henry F. Rothwell was elected vice

president in charge of engineering. Rothwell, who has been with the company since 1945, will be in charge of the design and development of all Delavan products. **Raymond Piper**, formerly foreman of the tool and die department was promoted to assistant superintendent. **Lloyd D. Long**, who recently joined the company has been appointed chief of a newly created inspection department.

**W. R. Roeyer** has been appointed sales manager of the Cooling Tower Division of Havens Structural Steel Co., Kansas City, according to Harry L. Havens, president. Roeyer has had many years of experience in the cooling tower industry. Bruce Brand, technical director of Havens Structural Steel, who had been acting as sales manager, will now head up the company's technical staff.

**Robert C. Servat** has been appointed branch manager of the General Controls Co.'s new branch office in New Orleans. Servat's new position will entail complete charge of all New Orleans branch office territory activities, including sales, engineering and service on the General Controls' line of automatic controls. The address of the new office is 426 Audubon Building.

**Frederick W. Smith** has resigned as president of Baker Refrigeration Corp., but will continue to serve the company as a consultant and as a member of its board of directors. Succeeding him as president of Baker is **Otto A. Pfaff**, president of American Wheelabrator & Equipment Corp., of which Baker Refrigeration is a division. In other changes, **Charles N. Bellm** was elected executive vice president, **Mark Mooney** was elected a vice president and manager of sales, and **Charles Marshall** was elected a vice president and contract production manager. It was an-

nounced that "no alterations in Baker's manufacturing or distributing programs are involved in the organizational changes."

**W. A. Brown, Jr.**, vice president and general manager of Liquid Carbonic Corp. has announced the appointment of **John P. Wright** as factory manager of the Durable Goods operation.

#### CORRECTION

In our September issue it was incorrectly reported that John F. Miller would represent the Arcold Co. in a midwestern territory.

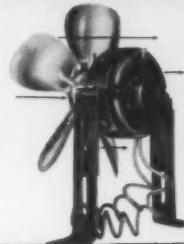
Miller is connected only with Sherer-Gillett Co., Marshall, Mich., as zone sales manager in the Michigan-Ohio-Indiana territory. He formerly was vice president and general manager of Super-Cold Midwest Co., Chicago.

Circle No. 108 on Reader Service Card

#### AN ADJUSTABLE RE-PLACEMENT FOR HERMETIC UNIT CONDENSER FAN ASSEMBLIES

#### THE TRANS AIRE MOTOR FAN BRACKET ASSEMBLY

The Transaire M.F.B. provides a single stock, all purpose solution to the replacement problem created by the great variety of condenser fans on all hermetic units.



- ADJUSTABLE TO WIDE VARIETY OF MEASUREMENTS—POSITIVE LOCKING AT ANY POSITION
- PERMITS USE OF ORIGINAL MOUNTING HOLES WITHOUT REFERENCE TO MODEL OR CATALOG NO.
- IMPELLER FAN AVAILABLE IN 4 DIFFERENT SIZES
- DUST PROOF MOTOR, RUBBER MOUNTED
- GUARANTEED FOR ONE YEAR

Write for details and prices (Give your wholesaler's name)

**PENN ELECTRIC MOTOR CO.**  
1825 WYLIE ST., PHILADELPHIA 30, PA.

Serving the refrigeration industry since 1928

#### BUY FROM YOUR REFRIGERATION WHOLESALER



\* SEE PAGE 59

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# NOW YOU CAN CASH IN ON ULTRA-LOW TEMPERATURE BUSINESS . . .

**with the New  
and Improved  
TEXACO  
CAPELLA  
OIL  
(Waxfree)**



There's a big new market for compressor oils in the ultra-low temperature field. With the new and improved *Texaco Capella Oil (Waxfree)*, you can reap a profit harvest because you can assure clean, efficient operation—not only under ordinary conditions but even at temperatures of minus 100° F.

Tested against the leading oils on the market, *Texaco Capella Oil (Waxfree)* exceeded them all in low haze and floc temperatures . . . freedom from wax precipitation. *Texaco Capella Oil (Waxfree)* is extremely pure. And its low pour test, high oxidation resistance and freedom from moisture are added factors in promoting compressor efficiency. *Texaco*

*Capella Oil (Waxfree)* does not react with refrigerants.

There is a complete line of *Texaco Capella Oil (Waxfree)* to meet the operating requirements of every type and size of compressor—regardless of age of compressor or type of refrigerant used. They are available in sealed 55-gallon drums as well as 5-gallon, 1-gallon and 1-quart containers.

Cash in on every type of refrigerating business including the expanding field of ultra-low temperature refrigeration. Order *Texaco Capella Oils (Waxfree)* today. The Texas Company, 135 East 42nd Street, New York 17, N. Y.

VISIT THE TEXACO EXHIBIT AT THE REFRIGERATION SHOW • BOOTH 211-215 ★ CHICAGO, NOVEMBER 5-8



## TEXACO Capella Oils (Waxfree) FOR ALL REFRIGERATING AND AIR CONDITIONING EQUIPMENT

TUNE IN . . . TEXACO STAR THEATER starring MILTON BERLE on television every Tuesday night. See newspaper for time and station.

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# THE PRACTICAL REFRIGERATION APPLICATIONS MANUAL

Readers are invited to submit their problems to this department. Each letter of inquiry will be answered personally by the author. The most interesting ones will be published in these columns. All problems should be clearly and completely stated and addressed to: COMMERCIAL REFRIGERATION, Manual Dept., 1240 Ontario St., Cleveland 13, Ohio.

## PROBLEM

"I HAVE a customer who has a freezer chest installation. He wants to put air conditioning in the basement play room where the freezer chest is located. Could I use the compressor operating the freezer chest to air condition this room?"

## SOLUTION

A S YOU have given us very little detailed data on your problem it is, of course, not possible for us to give you very much in the way of information. However, it is a pretty definite conclusion that you would not have any surplus capacity in the condensing unit used to operate the freezer chest, to handle an air conditioning load.

Furthermore, we assume that the condensing unit is self-contained in the freezer cabinet, which means the condensing unit would be located in the room you plan to cool.

The air conditioning job is an entirely different problem from the freezer cabinet, and would require proper engineering specifications with a separate and undoubtedly much larger condensing unit to handle the refrigeration load requirements.

We would suggest that you go to your wholesaler, who furnishes you with equipment. Give him complete details regarding this proposed installation. He will be able to furnish the necessary engineering advice to enable you to properly quote prices and the needed equipment for this installation.

If you have difficulty in securing this information locally, we will be

pleased to help you in this matter if you care to submit complete details regarding this job.

A satisfactory air conditioning or comfort cooling installation can only be obtained by making careful appraisals of the various load factors involved. This calls for the services of an experienced refrigeration engineer.

USE of liquid helium is the only known method of cooling matter to temperatures below -258° C., or 15° K. Since these low temperatures are necessary to the success of many experiments on the nuclear structure and force of metals, techniques for liquefying helium are of utmost importance to modern scientific research.

For their invention and development of a machine for liquefying helium, called the Collins Helium Cryostat, a professor at the Massachusetts Institute of Technology and his former graduate student and co-worker have been awarded medals by The Franklin Institute.

They are Dr. Samuel C. Collins of Watertown, Mass., recipient of the Institute's John Price Wetherill Medal, and Dr. Howard Oldford McMahon of Lexington, Mass., recipient of the Edward Longstreth Medal.

Announcement of the awards was made by Dr. Henry B. Allen, executive vice president and secretary of the Institute, who said that the scientists were being honored "in consideration of the invention and subsequent development of the first liquefier of helium to operate without the aid of external refrigerants . . . which has materially increased the number of laboratories and persons engaged in work at ultra low temperatures."

Circle No. 96 on Reader Service Card

## DELAVAN

### VALVE PLATES made especially for REPLACEMENT SERVICE

DELAVAN makes exact duplicates of valve plates for these manufacturers:

Crosley • Fairbanks-Morse  
• Chieftain • Federal • Frigidaire • Universal • Jomoco  
• Kelvinator • Stewart-Warner

WRITE  
FOR  
CATALOG  
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SEE US AT  
BOOTH NO.  
219 at the  
All Industry  
Show, Nov. 5  
through Nov.  
8.

DELAVAN  
MANUFACTURING CO.

1009 SIXTH AVENUE  
DES MOINES 13, IOWA

## SWIFT FAN BLADES

STANDARD EQUIPMENT WITH  
MOST REFRIGERATION UNIT  
MANUFACTURERS

PLATED  
HARDWARE

KITCHEN AND  
BATHROOM  
VENTILATORS

SWIFT  
MFG. CO. INC.

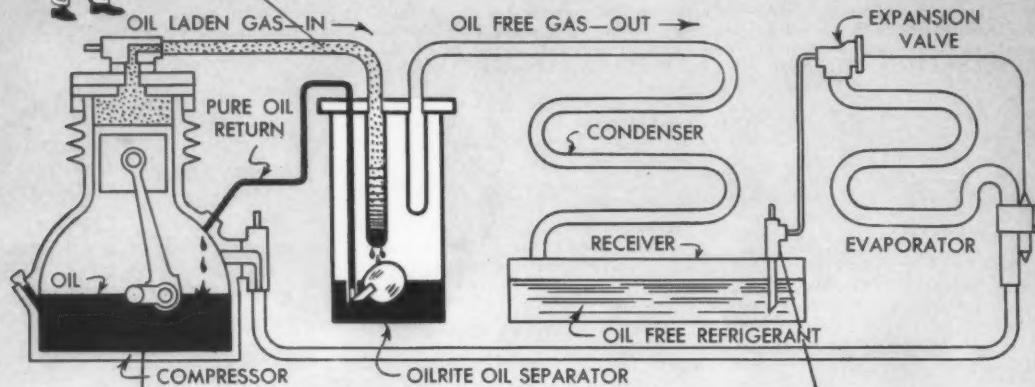
1455 E. NINE MILE RD.  
HAZEL PARK, MICH.

Circle No. 97 on Reader Service Card

# Keep oil where it belongs...



Compressor oil entrained in the hot gas leaving the compressor, would eventually find its way to the condenser and evaporator . . . but is instead trapped by the Temprite oil separator and automatically returned to the compressor. Thus, oil is kept where it belongs . . . in the compressor crankcase.



Available in capacities from 1/6th h.p. to 50 tons . . . for all types of commercial applications.

...with a **TEMPRITE** oil separator

Oil congeals quickly in low temperature coils, cutting down heat transfer and boosting operating time. Because of this common difficulty it is frequently impossible to reach desired temperatures. A Temprite Oil Separator overcomes

this problem and permits the refrigerant to boil at its true boiling point. Temperatures from 4 to 7 degrees lower are easily reached at no increase in operating time.

Write now for full particulars.

**TEMPRITE PRODUCTS CORP.**

ESTABLISHED 1929



CABINET  
WATER COOLERS



CYLINDER  
CARBONATORS



COMMERCIAL  
WATER COOLERS



SODA FOUNTAIN  
COOLERS



TEMPERATURE  
CONTROL VALVES



DRAUGHT BEER  
COOLERS



OIL  
SEPARATORS



ACCUMULATOR  
HEAT EXCHANGERS



INDUSTRIAL  
WATER COOLERS



EQUALIZER  
TANKS

Originators of Instantaneous

80° - 40°

Liquid Cooling Devices

P. O. BOX 72-B, EAST MAPLE ROAD

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126

BIRMINGHAM, MICHIGAN

NOVEMBER, 1951 • COMMERCIAL REFRIGERATION

# CONTRACTORS

NEWS • ACTIVITIES • PLANS

## "Completion" Rule on Building Doesn't Cover Inventory Stock

An explanation of what is meant by the phrase "required for completion" in Direction 2 to CMP Regulation 6 was explained recently by the National Production Authority, in a ruling requested by the Refrigeration & Air Conditioning Contractors Association of Southern California.

Direction 2 provides that construction of certain types of structures cannot be completed after Oct. 1 if they "require for completion" more than certain quantities of controlled materials.

The ruling obtained by the association from NPA explains that the term "required for completion" merely means that if the contractor or subcontractor has the materials in inventory or held for him by his supplier, it is *not* required for completion.

If the contractor or subcontractor has in his inventory the necessary controlled materials, or if he has any document from his supplier that the necessary controlled materials are being held for him, then the contractor or subcontractor may use such materials in the completion of any job started before Oct. 1, 1951.

The real question is whether the

contractor or subcontractor *owns* the necessary materials either in a warehouse or in the hands of his supplier or in his own inventory," according to a bulletin sent to association members by Henry B. Ely, secretary.

Whether the materials must be paid for in order for the supplier to set them aside for a contractor or subcontractor is a matter of arrangement between the supplier and the contractor or subcontractor.

If the supplier requires payment prior to setting aside the controlled materials, then they must be paid for.

If, however, he is willing to set them aside and, so to speak, label them for the contractor or subcontractor and give some documentary evidence to the contractor or subcontractor that such is being held for that person, then such controlled materials may be used for completion of the jobs commenced prior to Oct. 1, 1951.

It is not sufficient to have them on order only. If the contractor or subcontractor can obtain a warehouse receipt, that is the best possible evidence that he owns the controlled materials."

### 5-MAN BOARD NAMED TO GOVERN SEATTLE CODE

A six-man board of "overseers" representing all segments of the refrigeration industry has been appointed by Mayor William F. Devin of Seattle to administer the city's new refrigeration code.

The board will work with the city department of health and civil service commission to set up licensing requirements and to conduct examinations for refrigeration licenses.

Appointed to the board were Walter S. Merriam, service shop operator; Joseph Wilderman, contractor; Maurice A. Meyers, mechanic; John Bartoluzze, operating engineer; Fred Cornford, industrial engineer; and Harold S. Swanberg, industry representative.

### NEW MECHANICAL CODE PROPOSED IN PHOENIX

A proposed new mechanical code, regulating the installation, repair and inspection of refrigeration and air conditioning units, furnaces, elevators, boilers and pressure vessels was introduced in the Phoenix, Ariz., city council recently.

The code provides that contractors must be licensed, sets up licensing provisions for refrigeration journeymen, and requires that permits for work be obtained from the city.

A five-member advisory board will assist in administering the code. It will consist of two licensed practicing professional engineers, two licensed contractors, and one layman.

The board, which will be named by the city council, will have authority to rule on appeals from decisions of the city mechanical inspector. The code also provides for establishment

### Here Are Featured Speakers At Contractors' Convention



M. J. HOWLETT  
Regional Director,  
OPS, Chicago



H. J. PREBENSEN  
Air Comfort Corp.



ROBERT L. TYLER  
President,  
Tyler Fixture Corp.



C. S. STACKPOLE  
Vice President,  
Airtemp Div.



ALBERT G. WEIL  
Refrigeration  
Maintenance Corp.

of a board of refrigeration examiners to test and license refrigeration journeymen.

It will consist of the mechanical inspection supervisor, a licensed contractor as chairman, and a licensed refrigeration journeyman as vice-chairman.

### RACCA MEN PLANNING "GOOD WILL" VISITS

In an effort to create good will and better the relations between manufacturers and contractors, members

of the Trade Relations Committee of Refrigeration and Air Conditioning Contractors Association are planning to make personal calls on a number of equipment manufacturers.

RACCA feels much good can be accomplished by personal contact where both parties can freely discuss their problems and learn what the other party has to say and what he has to contend with. Mutual discussions, it is believed, will help eliminate many potential sources of friction and misunderstanding.

As a starter, a trip to Dayton,

Ohio, was made by George T. Howe, RACCA's trade relations chairman, and Walter McCarty, chairman of this activity for the Chicago RACCA group. Personal calls were made on William F. Switzer, commercial sales manager of Frigidaire Division and C. S. Stackpole, vice president of Chrysler Corp., Airtemp Division.

"Both firms were very cordial in their reception of the two RACCA representatives, and not only answered the numerous queries put to them, but enlightened them on many other factors of their individual operations which heretofore had been unknown", RACCA reported.

"The two days spent with these two manufacturers, it is felt, was time well invested and was instrumental in creating a greatly improved relationship with these two firms."

## HUBBELL CORPORATION

P.O. BOX 700, HAWLEY RD., MUNDELEIN, ILL.

*Designers and Manufacturers of Automatic Control  
Valves For All Refrigerants*



Booths 322-324



TYPE SA-5, SF-5

Type SA-5, SA-6, SF-5 and SF-6 Back Pressure Regulating Valves are of the conventional type used to maintain a constant evaporator pressure.



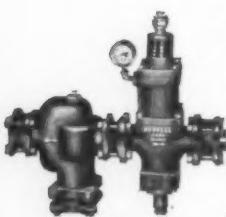
TYPE SA-7, SF-7

Type SA-7, SA-8, SF-7 and SF-8 Combination Back Pressure Regulator and Stop Valves. This regulator is of the conventional type used to maintain a constant evaporator pressure and the addition of a small electric pilot valve built into the head, makes it a suction stop valve.



TYPE DSA-9, DSF-9

The DSA-9 and DSF-9 is a dual regulator which will control evaporators with two load conditions requiring different refrigerant temperatures. The diaphragms in the dual head may be set for any two evaporator pressures and will automatically change from one to the other by the opening or closing of the electric pilot valve which is built into the head.



TYPE SA-6, SF-6

Solenoid Valves from  $\frac{1}{8}$ " to 2" inclusive for liquids and gases with composition seat discs readily renewable, coils for any electrical characteristics, built-in lifting stem standard, available with either screwed, welding flanges or copper tube connections.



TYPE A-2

All of the valves have built-in opening stems, which eliminates the by-passes usually used for manual operation. Available with either screwed, welding type flanges or copper tube connections, in sizes from  $\frac{1}{8}$ " to 8" inclusive.

Strainers are available in all sizes for liquid and gas with very large screen areas and arranged to bolt directly to valve or with screwed, welding flange or copper tube connections for installation wherever strainer is necessary.



TYPE A-3, F-4

Write for complete information on these and our many additional Refrigeration Controls and Accessories.



*"One water cooler was all we really needed, but he said he could get them for us wholesale."*

### SERVEL SETS MEETING ON AIR CONDITIONING

New product and market developments as well as sales plans for 1952 will keynote Servel, Inc.'s first annual air conditioning conference scheduled Nov. 8-10 in Chicago.

The conference, to be held in the Stevens Hotel, marks the first time the company has assembled distributors and gas utility representatives for a meeting devoted exclusively to air conditioning.

General chairman for the three-day program will be John A. Gilbreath, Servel's assistant vice-president in charge of air conditioning. Featured speakers will include W. Paul Jones, president; Louis Ruthenburg, board chairman, and John K. Knighton, vice-president in charge of sales.

Circle No. 99 on Reader Service Card for more information

## ENGINEERING POST OPEN IN BROWNSVILLE, TEXAS

A recent official survey by the Board of City Development reveals that an opportunity exists in Brownsville, Tex., for a consulting refrigeration engineer.

An increase in the number of quick-freeze plants and the ever increasing number of refrigerated boats of the shrimp and fishing fleets based at Brownsville were listed as two contributory factors in the city turning up short-handed in this type of specialist.

The advent of the major portion of the Gulf Coast shrimp fleets and the resultant construction of facilities to handle the vast tonnage of sea-food now clearing through this port, together with the natural increase in other lines of refrigeration, are said to make the opportunity for a qualified specialist attractive.

Interested parties are requested to contact the Board of City Development, Brownsville, Tex., for further information.

## RACCA URGES MEMBERS TO BACK SCRAP DRIVE

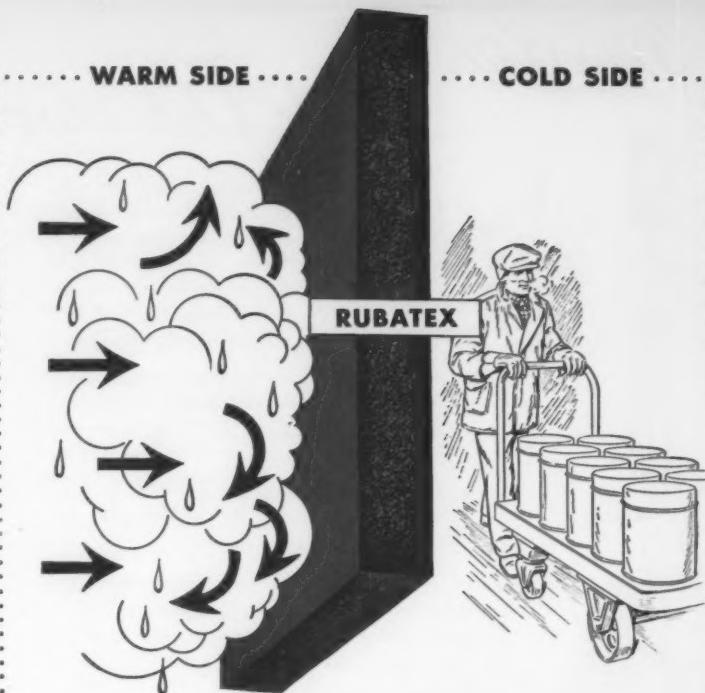
Refrigeration & Air Conditioning Contractors Association has urged refrigeration contractors and service men to encourage their customers to turn in all the iron and steel scrap they might have around their premises, to assist NPA in obtaining greater steel production.

Considerable amounts of dormant scrap are sometimes found in garages, stores, bakeries, trucking companies, hardware stores, etc., it was pointed out. Contractors and service men, in their calls on commercial establishments, can help a lot in getting this idle material back into use by turning it over to a recognized scrap dealer.

A million more tons of steel than was produced this year will be needed in 1952 if production of goods for civilian use is to be maintained at present levels. This goal can't be met unless the return of scrap is increased.

## JOB IS RECONSIDERED AFTER ASSN. COMPLAINS

An unidentified federal department agreed to reconsider a request for bids for refrigeration equipment after the Refrigeration & Air Conditioning Contractors Association of Southern California complained that terms of the request violated accepted



## No Vapor Transfer with- RUBATEX INSULATION HARDBOARD

Added vapor barriers are unnecessary when you use RUBATEX Insulation Hardboard for low-temperature insulation. Moisture cannot penetrate its closed cellular structure, therefore, water vapor transfer does not occur.

Impervious to moisture, RUBATEX Insulation Hardboard retains its maximum insulating efficiency indefinitely. This means general operating economy. Compressor running time, power generating

costs and maintenance are reduced to the very minimum.

RUBATEX Hardboard has good structural strength—weighs only 4½ pounds per cubic foot—and will not settle or crumble. It is rot and vermin proof and resists oxidation.

When you insulate, plan for lowest power cost—use RUBATEX Insulation Hardboard. Write for Design Data Book RBH-1-50.

Great American Industries, Inc.,  
RUBATEX DIVISION, BEDFORD, VIRGINIA



Closed cells shut out heat, cold and moisture. Photo-micrograph of a section of RUBATEX Insulation Hardboard shows the dense structure of individually closed cells which give this product its exceptional insulating properties.

## RUBATEX INSULATION HARDBOARD

"K" FACTOR 0.21

ZERO MOISTURE ABSORPTION

NO ADDED VAPOR BARRIER

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Circle No. 101 on Reader Service Card for more information

**Prest-O-Lite HALIDE**  
Trade-Mark

# Leak Detector



**Quick**—Always ready for use. Lights instantly. Locates exact source of leak in a few seconds. Avoids waste of refrigerant gas and costly shut-downs of equipment. An indispensable test unit for service and installation kits.

**Sure**—Reacts instantly to smallest concentrations of any of the non-combustible halide refrigerant gases (F-11, F-12, F-21, F-113, F-114, Carrene) commonly used in domestic or industrial systems.

**Simple**—Small, light, and handy. Easy to use anywhere. Durably built and dependable. No delicate parts to get out of order.

• For more details, see your jobber or write Linde Air Products Company, a Division of Union Carbide and Carbon Corporation, 30 East 42nd St., New York 17, N. Y.

"Prest-O-Lite" is a trade-mark of Union Carbide and Carbon Corporation.

**Order from your local Jobber**

**TAC** does what no other tool can do!



AT LAST! AN OPEN-END RATCHET WRENCH—the world's first true universal wrench. Never in the history of refrigeration and air conditioning servicing has any tool been developed to equal the ability of this patented design for connections on tubing, rods, piping, conduit, studs, etc. 64 socket sizes from  $\frac{3}{8}$ " to 4". TAC speeds all of your wrenching jobs.

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advanced tools  
for industry

**TAC**

TAC is the registered trademark of

**TUBING APPLIANCE CO.**  
7112 South Victoria • 10321 Anza Ave. • Los Angeles, Calif.

Circle No. 102 on Reader Service Card for more information

building practices, the association reports in a recent bulletin.

In a paragraph headed "Is a Refrigeration Contractor Really Necessary?", the bulletin reported that the purchasing agent on behalf of a federal department recently requested bids for refrigeration equipment only, with the following note:

"The successful bidder will be required to furnish or procure a competent erecting engineer to supervise and install all equipment as per plans and specifications. This erector to go on the payroll of (the purchasing agent) for the duration of the job".

The bulletin continued: "As between the parties who has the responsibility for the successful installation of the work, the erecting engineer, the purchasing agent or the refrigeration contractor?

"Has the refrigeration contractor any control over the installation? Does the refrigeration contractor merely ask a friend if he wants a job for which no charge could be made? Or should he supervise the job and be entitled to a fee for his service?

"The association has represented to this federal department that accepted building practices should be adhered to; that is, either the prime contractor do and be responsible for the entire installation, or the job be sublet.

"The name of the federal department is not given because its representatives have been most cooperative and have agreed to reconsider the request for bid".

THE Pennsylvania Railroad has announced that it is testing the use of refrigerated automatic vending machines on day coaches on the New York City to Washington, D. C., run.

The coin-operated machines dispense fresh sandwiches, pastries, milk, coffee, ice cream and candy for the convenience of passengers who can't or don't want to go to the diner.

## SEE TREND TO COOLING IN TEXTILE INDUSTRY

Two thirds of all major new textile industry air conditioning installations sold by Carrier Corp. since the beginning of 1950 have involved refrigeration as well as humidifying equipment.

A survey of this trend toward positive temperature control covered well over a hundred textile industry contracts totalling many millions of dollars, which had been placed with

Carrier during the year and a half period.

Virtually all new air conditioning systems for knitting mills, and for twisting, throwing, sizing, and coning operations included refrigeration for temperature control, as well as air washers and humidifiers and other conventional equipment.

In the spinning and weaving sections of the industry, installations calling for evaporative cooling without refrigeration have dropped from 64% in 1950 to 23% since the beginning of 1951, with more than 76% of the major new systems providing for refrigerated cooling. In some cases refrigeration was added to existing evaporative cooling systems.

Many of the biggest names in the industry are included in the recent boom for refrigerated temperature control. Among them are Burlington Mills, Lexington, N. C., Robbins Mills, Raeford, N. C., Greenwood Mills, Greenwood S. C., Stonecutter Mills and Spindale Mills, both in Spindale, N. C. Deering Milliken is represented by Judson Mills, Greenville, S. C., Gaffney Mfg. Co., Gaffney, S. C., Hartsville Cotton Mills, Hartsville, S. C., and Kingsley Mill, Thomson, Ga., J. P. Stevens and Co. by its Carter Fabrics division, Wallace, N. C., and Milledgeville Mills, Milledgeville, Ga., and Vanity Fair by Escambia Industries, Atmore, Ala., and Clarke Mills, Jackson Ala.

Hosiery manufacturers include McCrary Hosiery Mills at Asheboro and Ramseur N. C., Lynchburg Hosiery Co., Lynchburg, Va., and Asheville Hosiery, Asheville, N. C.

#### SHOWS PACKAGED LINE



J. M. Oberc, Inc., Detroit, has recently been appointed exclusive agent for the complete line of Bakeraire packaged air conditioners in the eastern Michigan territory. Joe Oberc (left) is shown here pointing out features of one of the packaged units to some of the 73 refrigeration contractors and customers who attended the meeting at which the equipment was introduced in the territory.



## PENGUIN ISLAND DISPLAY CABINET BOOTH 605, 7TH ALL-INDUSTRY EXPOSITION

A great new dual service profit producer display cabinet. Fluorescent light in price panel shows packages off to best advantage.

Has PENGUIN PACKAGED INSULATION. Heavy, polyethylene treated kraft paper encasing fibre-glass insulation creates a positive moisture barrier.

WRITE FOR LITERATURE ON THIS AND OTHER MODELS

Motor . . .  $\frac{1}{2}$  H.P., high capacity. Air-cooled using Freon F-22. All aluminum liner with refrigerated divider plates give positive refrigeration to every package.

Overall dimensions	Height	Width	Length
	44"	28"	54"

WARRANTY
ALL PENGUIN CABINETS CARRY AN UNCONDITIONAL ONE YEAR GUARANTEE.  
AN ADDITIONAL FOUR-YEAR WARRANTY FOR THE SEALED-IN MECHANISM IS  
AVAILABLE

**PENGUIN SALES**  
15440 PLAINVIEW      DETROIT 23, MICH.



## CONDENSING UNITS

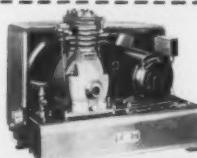
*for every cooling purpose*

There is a complete line of Lipman Condensing Units in models from  $\frac{1}{4}$  to 40 H.P. . . . and each one provides a correct answer to a particular cooling requirement. Lipman is refrigeration at its best . . . write today for complete information! Also packaged air conditioning units and a new Ice Tip Machine.

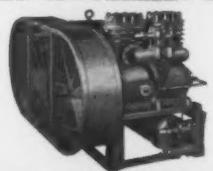
A Product of  
**Yates-American**  
Beloit, Wisconsin



3 H.P. Water Cooled Unit



1 1/2 H.P. Combination Air and Water Cooled Unit



15 H.P. Condensing Unit



1 H.P. Air Cooled Condensing Unit

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## *One always has to be first... and in controls it's Ranco*

Ranco has for years led the field in the production of practical refrigeration controls. Today, Ranco still is the front runner, with more than 35,000,000 controls in use throughout the world. Insist on genuine Ranco controls—available for more than 4,000 replacement installations.



# Ranco Inc.

COLUMBUS 1, OHIO

WORLD'S LARGEST MANUFACTURERS OF REFRIGERATION CONTROLS

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## THE SERVICE MAN'S DEPARTMENT

# HERE'S HOW!

Edited by  
Warren W. Farr

### Your Servicemen Can Sell

Want to build up your sales force without adding to your personnel? Sounds impossible, but it's really simple. Just turn your servicemen into salesmen.

This doesn't mean that you should give all your servicemen sample cases and send them out on the road, but it does mean that that you should give your servicemen the same training that you give your salesmen.

Your servicemen already know more about the function of your shop than your salesmen, so all you have to do is to teach them the application of your products, prices, and the sales techniques which you pass on to your salesmen.

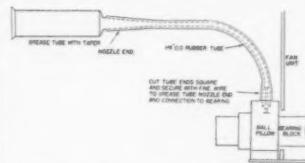
Your serviceman has a decided advantage when it comes to sales because he is familiar with the establishments of your customers. When he is in your customer's place of business on a service job, he can keep his eyes open for any needed improvements. This way, your serviceman can mention needed improvements to your customer that your salesman doesn't even know exist.

When the equipment which your serviceman has been called upon to repair is too badly worn or is being used in the wrong application, he can give the customer the complete story for new equipment right down to prices. He gets to the customer first and he has the opportunity to sell your customer when he is in the mood to buy.

By installing a good incentive plan with commissions to keep your servicemen alert they will soon be doing a bang-up selling job. If your servicemen are doing a good selling job they can create much customer good-will by saving breakdowns.

We are not suggesting that you fire all your salesmen, because your servicemen will never produce the

### I do it this way...



AIR conditioning fan units fitted with pillow block bearings in inaccessible locations can be lubricated easily by use of the following make-up:

Obtain about 6 inches of  $\frac{1}{4}$ -inch o.d. rubber tube. Cut both ends off square. Fit one end over the tapered nozzle of a 2-ounce tube of ball bearing grease, and the other end over a bearing grease hole connection made by drilling a  $\frac{1}{16}$ -inch hole through the center of a  $\frac{1}{4}$ -in-20 thread brass screw about  $\frac{3}{8}$ -inch long, after the screw head has been cut off.

Prime the grease from the grease tube down the rubber tubing into the grease connection for the bearing. Then enter the connection into the top of the bearing at the greasing hole.

With this make-up you do not run the danger of rupturing a bearing side seal as is so often done with a pressure-type grease gun.

F. R. Wennington,  
Montreal, Quebec.

sales that your salesmen can, but they can surely add to your sales volume without adding to sales expense.

The opportunity for your servicemen to sell will not come every day, but when it does present itself, your servicemen should be equipped to do a real selling job.

Try it and you might be surprised to learn that your servicemen can sell.

### Do You Have a Screw Loose?

One service mechanic we know banishes the "bugaboo" of lost screws while removing refrigerator hardware by screwing the hinge or latch right to a piece of heavy cardboard just as soon as it is unfastened from the equipment.

Using the original screws to do this not only keeps the screws from becoming misplaced but insures that each screw is returned to its proper position when the hardware is replaced.

### 3-Point Operational Check For Hermetic Systems

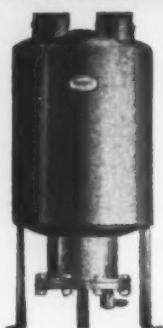
A simple series of three operational checks for refrigeration equipment powered by hermetically sealed condensing units is outlined in a recent edition of the *Philco Serviceman*.

The first check, a visual one, is for frost on the evaporator. Uniform frost distribution over the entire evaporator indicates that the system is operating normally and that the required amount of refrigerant is circulating. "Frost-back" should not extend beyond the end of the suction loop at the point where it leaves the evaporator.

A service thermometer frozen into the evaporator so that the scale is readily discernible can be checked against the operating temperature for the model being inspected. Efficient operation means uniform frost distribution.

Check No. 2 involves "cut-in and cut-out" temperatures. If these are normal, it is an indication that the system is operating efficiently. Abnormal cut-in and cut-out temperatures may be caused by restricted air flow through the condenser, excessive

# AMINCO OIL SEPARATORS



Aminco Oil Separators protect compressors by maintaining correct oil level in crankcase. By excluding oil from refrigerant stream they enable coils, condenser valves, dehydrators to function most efficiently. Made for jobs from  $\frac{1}{2}$ -hp to 120 tons, these units are used wherever efficient refrigeration is desired. Available for F-22 on special order at regular price.

Full descriptive bulletins on request.

## AMINCO REFRIGERATION PRODUCTS CO.

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## Buy Peerless FOR PERFORMANCE



### The PIE PLATE UNIT

#### Unmatched for Efficiency

Here is today's outstanding refrigeration value. The Peerless Pie Plate Coil Unit delivers maximum efficiency because it utilizes all of the cooling surface. Its compact design permits it to fit into less space.

The power-packed round coil of improved evaporator design is ideally suited for use in soda fountains, direct draw bars, reach-in refrigerators and similar cooling applications. It has all-aluminum casing and brackets; aluminum fin surface on copper tubing; oilless fan motor. Available in three sizes, with or without drain pan. Write for detailed information.

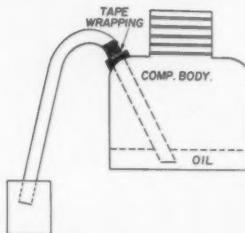
## Peerless of America, Inc.

1501 No. Magnolia Avenue  
Chicago 22, Illinois, U.S.A.

accumulation of ice in and around the evaporator, trouble in the condensing unit, low line voltage, a faulty door seal on a refrigerated compartment, or location of the unit next to some piece of heating equipment.

The third operational check is the wattage check. A detailed chart should be found in the service manual covering the equipment in question, giving proper wattage readings for various models.

*I do it  
this way...*



**I**N CHANGING oil in a compressor, I use a little kink that may be of some help to other servicemen.

First pump the unit down to 1 pound by closing the compressor suction valve. Do this in easy stages to avoid oil slugging in the compressor. Then leave the gauge connection open to bleed off all pressure in the crankcase.

Next remove the oil test plug in the side of the compressor and insert a piece of  $\frac{1}{4}$ -inch copper tubing through the hole. Push the end of this tubing down to the bottom of the compressor, then wrap some friction tape around the tubing where it comes out of the compressor in order to make a rough seal to restrict gas leakage.

Finally, bend the tubing in an inverted "U" shape and place an empty can under the exposed end to catch the oil.

Now crack the suction valve slightly, build up about 1 pound pressure in the crankcase, and out comes the oil through the tubing. When no more oil will come out, take a funnel and add new oil to the job to the required level. I use a piece of common black insulated wire as a gauge stick.

It takes only a few minutes to change oil this way, and makes no mess. Try it and see for yourself how nicely it works.

W. House,  
Shreveport, La.

## Question Corner

**Question:** Can you use Freon-22 in a unit designed for Freon-12?

**Answer:** Freon-22 may be used with success in Freon-12 units if the compressor speed is reduced.

Since Freon-22 does more work for a specific volume than Freon-12 the motor would be overloaded if the change in speed is not made. The drop in speed is approximately 35%.

Some thought must also be given to shaft seal protection. Since F-22 has higher pressure than F-12 for the same temperature, the operating backpressures will be above those of F-12.

Usual practice is to operate the Freon-22 system with a solenoid valve in the liquid line which allows pump-down on the off cycle, and a pressure control prevents any rise in base pressure above safe limits.

Another point to remember is the change in water valve that will be necessary when changing from F-12 to F-22.

If the points mentioned are taken care of the system should operate on F-22 successfully.

## BUY FROM YOUR REFRIGERATION WHOLESALER

# SHANK REFRIGERATION PRODUCTS

## FOR DEPENDABLE SERVICE

### ALL-STEEL GAUGE SETS

All-Steel Construction. Automatic shut-off of liquid in case of glass breakage. Composition packing rings give long life, no-leak seal.



### Semi-Steel Shut-Off Valve

Highest grade non-porous metal—full size parts—clean cut threads. Back seated stem—Shank design base—perfect alignment. Long life packing ring.

IF YOUR JOBBER DOESN'T STOCK—  
WRITE

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## OPPORTUNITIES

(Classified Advertising)

Rates: for "Positions Wanted," \$4.00 minimum, limit 25 words. For all other classifications, \$4.50 minimum for 25 words or under, each additional word 15¢; boldface type or all capitals, \$7.50 minimum for 25 words or under, each additional word 20¢.

### POSITIONS AVAILABLE

**SALES EXECUTIVE—Industrial Sales Manager**—Worth at least \$10,000 per year wanted by leading independent manufacturer of "package" air conditioners and air dryers. Responsible for selling standard and special units for industrial use through distributors and direct to manufacturers, government buyers, and sub-contractors. Ability to make BTU estimates, use psychrometric chart and knowledge of practical special design essential. For personal interview send full background information in confidence. If you're not interested advise of any good candidates you know. E. A. Bonneville, Remington Air Conditioning, 13 Willey St., Auburn, N. Y.

**MANUFACTURER'S REPRESENTATIVES WANTED**—Complete line of refrigerated store fixtures, including latest design self-service models for super markets. Contact dealers, distributors and food chains. Our sales program for 1952 provides for the establishment of representatives in several desirable territories in United States. Have attractive proposal. Write us or visit our display at All-Industry Show in Chicago, Booth 101, Federal Refrigerator Mfg. Co., P. O. Box 465, Waukesha, Wisconsin.

**PLANT MANAGER**—For our plant in Virginia, manufacturing refrigeration equipment, consisting of heavy sheet metal work, pipe bending and welding, and woodwork. Our interest is confined to those having strong experience in the actual manage-

ment of similar operations in plants of 50 to 100 employees where managerial responsibility included manufacturing, procurement, estimating and engineering. Resume should include salaries earned in recent years. Box 11251, Commercial Refrigeration.

**WANTED—Refrigeration, Commercial and Industrial Salesmen.** Must be experienced, and have references. Franchised Frigidaire dealer, also distributor for several lines. Old established business, real opportunity in new territory. Write Box 11151, Commercial Refrigeration & Air Conditioning.

**COMMERCIAL REFRIGERATOR salesman** to handle WARREN REFRIGERATOR dealer and chain accounts in Ill., Mich., Ind., Wisc. Must have experience in our industry. The Warren Co. Inc., P. O. Box 1436, Atlanta 1, Ga.

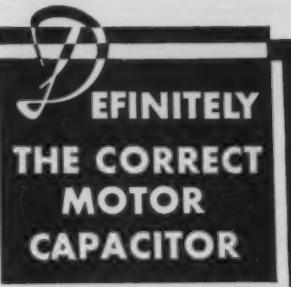
### TRAINING AVAILABLE

Course on sealed unit rebuilding trade secrets disclosing exclusive methods for all operations. \$12.50 or write for details. H. Custer, Box 98, Center Line, Michigan.

### ASHVE NEW YORK CITY HEADQUARTERS MOVED

The American Society of Heating and Ventilating Engineers moved its headquarters from 51 Madison Ave., New York City, to 62 Worth St. on October 1.

The new offices, occupying the entire fourth floor at the Worth St. address in a building recently renovated and air conditioned, will take up about 2,750 sq. ft. of floor space as compared with approximately 1,600 sq. ft. at its former quarters.



So many refrigerator makes...  
so many motor types... so  
many kinds of capacitors! How's  
a serviceman going to pick the  
right replacement?



That's easy. Just ask your Aerovox distributor about Aerovox listings, the Capacitor Selector, and the Emergency Capacitor. They'll help you handle that replacement in a jiffy.



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Hamilton, Ont.

**NO MORE FREEZE-UPS**  
*of expansion valves or capillary tubes!*

**ICE-X** works like magic

SERVICE MEN SAY: "ICE-X IS GREAT!"



When ice forms in expansion valves or capillary tubes, ICE-X is a sure remedy... ICE-X is non-corrosive —harmless to parts. An ice-eliminator that can't be beat for Freon, Carrene, or Methyl Chloride systems... Order from your jobber. If no jobber, order direct.

Service doesn't falter  
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Jobbers: Ask for special offer!

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and AIR CONDITIONING • NOVEMBER, 1951

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# **POSITIVE Control on ANY Application!**

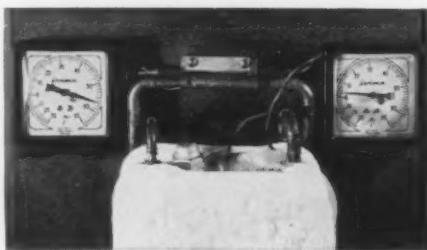
**NEW — Model 207C Thermostatic Expansion Valve**



Model 207C Adjustable Superheat Thermostatic Expansion Valve. New, advanced A-P design. For all temperature applications, without adjustment.

Model 207C can be furnished with external equalizer if desired. Two sizes: up to  $\frac{1}{2}$  ton and up to 1 ton Freon 12. Compact design for easy installation.

## **Positive Proof of Positive Control!**



Here's positive and convincing proof of the efficiency of A-P Liquid Charge. In the unit pictured above, there is a 54 degree difference between valve and bulb — and the valve is mounted upside down! Despite these conditions, the bulb provides perfect control. Unusual? Yes; but typical of the efficiency and dependability you can expect from A-P Liquid-Charged Valves!

 **Dependable Liquid Charge Gives You POSITIVE Control on Any Application — at Any Temperature — In Any Position!**

When you use an A-P Liquid-Charged Thermostatic Expansion Valve — like the new, advanced Model 207C — you "tame" your toughest applications!

Because — no matter what the application — you get dependable, accurate control with an A-P Liquid-Charged Valve. You can install it right side up — upside down — sideways — or at any angle required by the installation. You can install it in any ambient temperature, either warmer or colder than the thermo bulb — or place it either higher or lower than the bulb; you'll still get accurate, POSITIVE control!

And besides, you don't need one valve for low temperature — another for commercial temperature — and still another for air conditioning. ONE A-P Liquid-Charged Valve can be used for ANY application. Get the story on the new Model 207C and other A-P Liquid-Charged Valves — today!



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**A-P CONTROLS CORPORATION**

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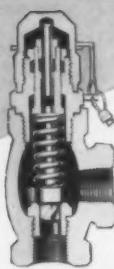
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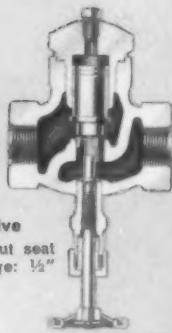
**Screwed Bonnet Shut-Off Valve**  
Size range: Globe and Angle,  $\frac{1}{4}$ " thru 1"  
Tees,  $\frac{3}{8}$ " thru 1"



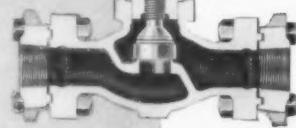
**Bolted Bonnet Shut-Off Valve**  
Size range: Globe and Angle,  $1\frac{1}{4}$ " thru 2"



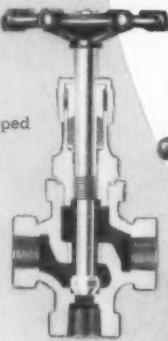
**Check Valve**  
With or without seat lift. Size range:  $\frac{1}{2}$ " thru 2"



**Flanged Shut-Off Valve**  
Size range:  
Globe,  $1\frac{1}{4}$ " thru 4"



**Three Way Dual Shut-Off Valve**  
Size range:  $\frac{1}{2}$ " thru 1", capped and handwheel types



**Expansion Valve**  
Size range: Globe and Angle,  $\frac{1}{4}$ " thru 1"



**Liquid Level Gauge**  
Forged Steel  
Size range:  $\frac{3}{8}$ " and  $\frac{1}{2}$ "



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